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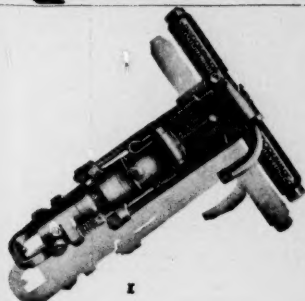
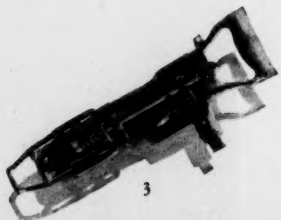


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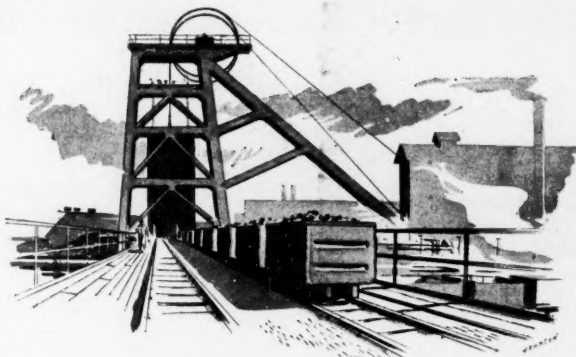
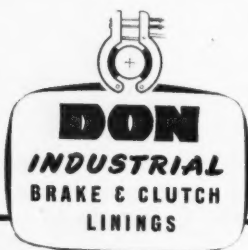
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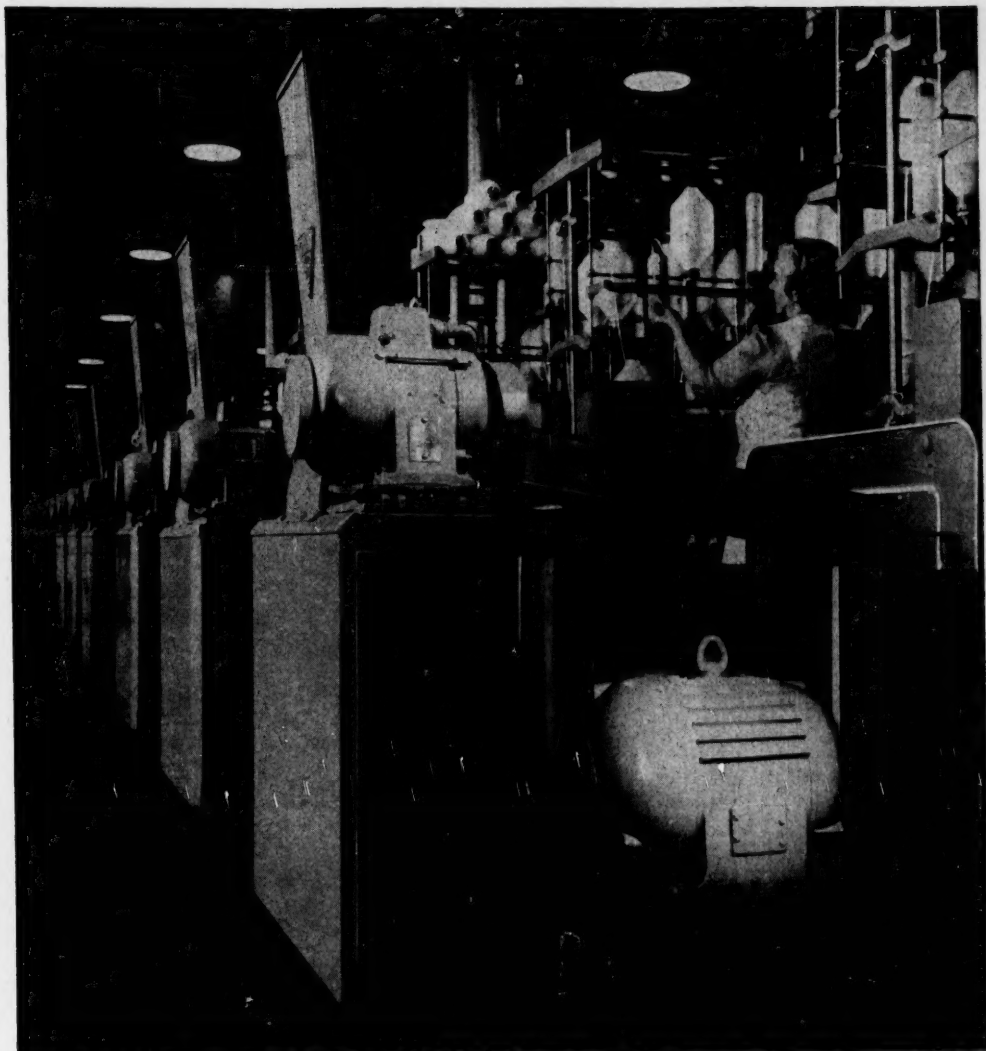
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The Mining Journal

Established 1835

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NOTES AND COMMENTS

Malaya's Tin Prospects Impaired

The Colonial Secretary, Mr. Oliver Lyttelton, is now due back from his visit to Malaya which may easily prove a decisive influence on the fortunes of that country, and for the great British interests which have been built up in the Federation, and the Colony of the Straits Settlements. The somewhat fragmentary reports cabled of what he has said in the course of his visit fully justify the anxiety which we have long felt, and in some measure expressed as regards a deteriorating situation. It is long since we have had at the Colonial Office a minister who was not content to acquiesce in a process of disintegration of British interests and who can count on the support of a leader like Mr. Churchill, who was once reported as saying that as the King's chief minister he was not prepared to assist at the dismemberment of his Empire.

Malaya is a Protectorate in which the authority of the Sultans has in course of time become increasingly nominal. In earlier days the ability, tact, and local knowledge of British residents made relations between the native rulers and the paramount power smooth and easy, but latterly, and perhaps inevitably, during and since the war decisions from home have been imposed and the Sultans have grown resentful of this naked interference. No doubt the defeat of the British by the Japanese and their occupation of the country is a primary cause of the present *malaise*. The inhabitants, whether Malays or Chinese, are not British and they can hardly be reasonably expected to strain themselves in opposing the hostile elements until they feel sure that we are not again going to withdraw and leave them to the tender mercies of the Communists. This fact no doubt explains their anxiety to get from Mr. Lyttelton assurances that the British government will not vacate, and underlines the importance of the assurances he is

said to have given, especially to the Chinese for revision of the structure of government.

However, *The Mining Journal* and its readers are more directly concerned with the future of tin mining than with political issues. Elsewhere in this issue we report statements by two of the chairmen of the Tronoh Malayan group of companies to their shareholders. Speaking

broadly, the chief interest of these statements lies in the evidence that they are at present pinning their faith on Siam rather than Malaya to provide fresh mining fields to meet the rapid depletion of reserves of mining lands in the F.M.S. itself. Mr. H. Ashworth Hope said, "We have, as always, been busy searching for likely properties

outside Malaya," where, as Mr. Simms remarks, "the likelihood of proving anything but low grade dredging areas appears remote."

The main issue, Mr. Simms emphasized, is security and it is a bitter reflection on our policy since the war that these experienced directors of big tin-mining enterprises consider security from attack or expropriatory taxation to be greater in an untried East Asiatic country like Siam than in Malaya which in happier days, gave us the famous battleship *Malaya* to help to defeat the Kaiser.

The indications now given of a change in direction of tin investment in the Far East resulting from a realization of the critical situation to which the virtual cessation of prospecting has brought Malaya ever since it was forbidden during the imposition of International Tin Restriction, may be an unwelcome surprise in some quarters but it will be easily understood that during the rule of the Socialist government, with its strong ideological conceptions, no effective protest was possible. Moreover, a growing system of official secrecy and government censorship has tended to repress audible criticism, and this, it is to be hoped, will now cease.

The Mining Journal

wishes all its readers a Happy Christmas
and a Prosperous New Year

Pneumoconiosis Among British Coalminers

The report of the Medical Research Council 1948-50 to the Committee of Privy Council for Medical Research, now issued, says that the largest single effort which the council is making in the field of occupational health still remains the attack on Pneumoconiosis in Coalminers. Earlier reports issued in 1942 and 1943 by the Medical Research Council established that Pneumoconiosis—the term now used to cover pulmonary conditions due to dust among persons engaged in working coal—is at present at any rate largely a South Wales liability. The annual silicosis incidence rate per 1,000 employed underground in other parts of the United Kingdom between the years 1931-37 was 0.06 whereas in non-anthracite mines in South Wales it was 0.99 per 1,000 and in the anthracite mines 5.23 per 1,000. This remarkable variation in incidence explains why Welsh members of Parliament have taken the lead in pointing out the seriousness of the risks which many of their constituents experience. The current report stresses the development of primary pneumoconiosis into progressive massive fibrosis and suggests that this advanced stage may be due to the lung being infected by tubercular bacillus. This, of course, is no new conception of the degenerative process. When at the time of the second Boer War many Cornish miners returned from the Rand and speedily fell victims to tuberculosis it was generally accepted that this was due to their being already severely infected by silicosis which owing to the extremely dry air of the Rand had not taken the more complex form which it assumed subsequently in Cornwall.

Accordingly the Council's Research Unit in South Wales has started an ambitious investigation of the possible relationship between the tuberculosis infectivity in the community and the development of progressive massive fibrosis in coalminers, but results can hardly be expected for at least five years. The report does not show whether this enquiry will be so sectionalized that anthracite workers will be clearly distinguished from those producing bituminous or steam coal, though it is natural to suppose that in view of the Council's earlier reports as to the area variation of silicotic complaints this distinction will be made.

Recently, a Bill to extend compensation under the Workman's Compensation Act or the new Industrial Injuries Insurance Scheme in the case of victims of pneumoconiosis and byssinosis (cotton mill dust) received its third reading. The growth of pneumoconiosis appears very marked though this may be largely due to the establishment of compensation and consequently increase in claims. One speaker declared that to-day about 7,000 men were presenting themselves for medical examination, more than half of whom were diagnosed as affected. The speaker thought that between 800 and 1,000 people died of pneumoconiosis every year and that there must be some 20,000 to 30,000 cases. How far this is an exaggerated estimate is hard to judge but there seems no doubt that the mischief is extensive and its ventilation is hardly likely to render coalmining more attractive to new entrants.

An intriguing report reaches us from Duisberg where, according to Reuter, two German mining experts claim that spraying a thick layer of salt on floors and walls of mine shafts assists in preventing both silicosis and underground explosions. Several mines are using the process, discovered by Herr Ernest Schlochow and Herr Josef Rohe. Their method is to spray the salt with water. The coal dust then sticks to it—in fact two birds with one stone.

Brazilian Oil Development

A new joint stock company is to be organized in Brazil to deal with all activities relating to petroleum and shale oil, writes our Brazilian Correspondent. To that effect, two Presidential Bills, relating to oil, were submitted to the Brazilian Congress early in December. The first creates a joint stock company, named *Petroleo Brasileiro S.A.*, with mixed state and private capital, to carry out, directly or through subsidiaries, all operations connected with prospecting, extraction, refining and selling petroleum and its derivatives as well as shale oil. The aim of the second Bill is to supply the company with the necessary funds.

The initial capital of 4,000 million cruzeiros (£80,000,000) will be subscribed by the Federal Union, which will incorporate its oil, gas and bituminous schist properties in the company's assets, and make up the difference in cash. New issues will raise the capital to at least 10,000 million cruzeiros (£200,000,000) by the end of 1956.

The funds required to increase capital will be derived from part of the tax on petroleum products; from increased customs dues on imported automobiles; from a tax on luxury articles and on remittances to pay for imported automobiles; from contributions payable under the existing law by holders of authorizations to exploit liquid fuel; and from compulsory subscriptions, to be exchanged for shares, from the owners of any description of motor vehicle, including aeroplanes and watercraft.

President Vargas does not exclude foreign participation, as demanded by the 1938 law, but restricts it to such an extent that the big oil companies are not likely to be interested. Thus, Brazil will continue to rely for technical assistance on the specialized organizations, engaged under contract, to direct prospecting, drilling and refining operations.

Developing Mineral Resources in the Colonies

To discover and develop the natural resources of the British Empire for the benefit of the indigenous populations as well as for the good of the Empire's economy has long been the avowed policy of the British Colonial Administration. But it is only during and since the close of the last war that the need has arisen in an acute form to discover and develop these mineral resources. In practically every case the mineral exploration and development of these areas has been achieved by a combination of public and private enterprise, exemplified on the one hand by the Colonial Geological Surveys, and on the other by British companies established in the area. It is our purpose to focus attention during the next few months on the work which is being carried out in the smaller and perhaps lesser known colonies, through a series of articles dealing with the exploration and development of the mineral resources of the territories concerned. We are introducing the series with two articles. The first, which appears in this week's issue on page 642, will deal with the Bechuanaland Protectorate and in next week's issue activities in the adjacent territory of Swaziland will be described. Other less well known colonies will be dealt with over the next few months. The reader may thus be able to visualize not only what are the mineral resources in these areas, but also what is being done to make them available to the whole world this side of the Iron Curtain.

As the Markets will be closed over the Christmas holiday, our two regular market features—Metals, Minerals and Alloys, and Mining Markets—will not be appearing in our next issue. They will be resumed the following week.

South Africa

(From Our Own Correspondent)

Johannesburg, December 3

Marketwise, the past month has been a bad one for gold shares. The average level of gold share prices is now barely above those ruling immediately prior to devaluation, and Stock Exchange circles here see no prospect of a change for the better this side of Christmas. In the mining world, however, there have been quite a number of interesting developments—including a new mine in the Klerksdorp area and the official starting up of Welkom in the Orange Free State.

STRATHMORE GROUP SIRES ELLATON GOLD

One of the pioneer families of the Klerksdorp goldfields are the Scotts, and it is therefore most appropriate that Colonel Jack Scott's Strathmore group, which was responsible for the opening up of Stilfontein and the exploratory work in the Lucas Block, should also be the discoverer of the new Ellaton area just south of Klerksdorp.

The striking fact about this property is the extreme shallowness of the Vaal-Basal reef formation, the first discovery being made on an outcrop, one of the first since the very earliest days of the Central Witwatersrand and the only known outcrop of this formation. The area was drilled many years ago, when the potentialities of the Carbon Leader formations were unknown and inter-sections made at that time were not considered important. But the results recently obtained on Stilfontein and Vaal Reefs and in the Lucas block, prompted the Strathmore group to deflect those old boreholes, which gave most encouraging values, and it was decided to carry the work further. (Details of the Ellaton Gold Mining drilling programme were published in *The Mining Journal*, November 23.—Ed., M.J.).

A shaft is being put down on the eastern edge of the property, where the Buffelsdoorn fault has thrown the reef about 3,000 ft. upwards and it is expected that it will reach the reef horizon at about 270 ft., from where a crosscut of approximately 70 ft. will be driven and development started. By the middle of November this shaft was down about 130 ft., so that it should not be long before more news is forthcoming.

With the shallowness of the reef—the maximum depth revealed in the drilling programme so far being around 2,000 ft.—the amount of capital required to bring this new area to the production stage should be very much less than that of the other new mines. Although no official announcement has yet been made, it is suggested that its initial authorized capital will be £1,000,000 of which £750,000 will be issued and £250,000 held in reserve. So far as plant for Ellaton is concerned, the Strathmore group has got off to a flying start. (It may be recalled that it was the representatives of this wideawake group that spotted the two 3,000 h.p. winders in the U.S.A. which were consigned to Russia, and managed to have them diverted to this country, where one set is at Stilfontein and the other at Harmony.) In the case of Ellaton, the Strathmore group has been able to buy a complete reduction plant in West Africa, which is now on its way to the Union. It is expected that milling will start at the rate of 7,000 tons per month, which would provide sufficient funds to finance development work.

Looking back it is difficult to realize that less than four years ago a bare stretch of veld existed where the Welkom mine stands to-day. Thus it was fitting that at the official opening ceremony Sir Ernest Oppenheimer should have

paid tribute to the engineers who planned the mines in this area.

The first output results from St. Helena and Welkom have now been issued. St. Helena milled 40,000 tons against an estimated 50,000 tons and Welkom milled 30,000 tons against an estimated 50,000 tons. Tonnage treated by St. Helena was a mixture of payable ore and development rock while the whole of the tonnage milled at Welkom came from development rock. This explains the low average values obtained which for St. Helena was 1.86 dwt. per ton and 2.56 dwt. per ton for Welkom. It also means that these results cannot be taken as indicative as to what the recovery grade will be like when the mines get into full stride.

The chief difficulties facing the mining industry—labour shortages and rising costs—have monopolized the outlook of the chairmen at most of the company meetings. About the only one so far who has expressed the view that the labour position might improve and that the increase in costs may be checked was Mr. H. J. Joel at the "Johnnies" meeting.

RIISING COSTS STUNT GROWTH OF GOLD MINES

The question of costs is a serious one for the low-grade mines, in that just as they receive the greatest benefit from an increase in the price of gold they are the most vulnerable to rising working expenditure. At the Modderfontein East annual meeting, Mr. P. H. Anderson pointed out that as a result of devaluation, the sterling price of gold was raised by 44 per cent, but that after two years, six out of the 42 producing mines, including Modder East, found that working costs had risen by more than 44 per cent, and seven others were nearing this situation. The rate of increase in working costs per fine ounce of gold produced is now approximately 1s. a month. In addition, a disturbing feature is that each increase of 1s. 3d. per ton milled raises the pay limit of the mines by 0.1 dwt., which in turn reduces the payable life of the industry as a whole.

This breakdown of the trend of working costs and its effects, spotlights more than ever the contribution made to the profits of the mining industry by revenue from sales of gold at premium prices. It can readily be realized, therefore, that considerable concern is felt here at the decision of the Australian authorities to allow all gold produced there to be sold in the premium market, provided U.S. dollars are received in payment.

While the amount of gold being thus offered to the premium market is not great, it is felt that this decision strikes at the very foundations of the self-imposed restrictions in other gold producing countries limiting sales to 40 per cent of their total output. Any general defection from this principle can only lead to a free-for-all in the premium market and could lead to the death of that fabulous old goose which lays the golden eggs.

Judging by the figures issued by the Rhodesian authorities for October, it would appear that revenue from premium sales during the current quarter will be considerably below those for the September period. The October price was \$37.25—a premium of \$2.25, and applying this yardstick to the South African output, as the Union acts for the Rhodesian Government in the matter of premium sales, the premium obtained here for October must have been in the neighbourhood of £310,000 compared with approximately £530,000 a month for the preceding quarter. Nevertheless, usually reliable sources here take the view that once the premium market settles down and provided that there is no breakdown in the control of supplies of metal to the market, the gold premium will pick up again, with consequent benefits to the mining industry.

I.O.Co's. Giant Ore Loading and Storing System

The multi-million dollar ore storing and loading system now under construction at Seven Islands is scheduled for completion in 1954, the same year in which iron ore from the Labrador-Quebec iron fields will be available for shipment. Much has been written about this great new iron ore field but little is known of the arrangements which are being made to handle the ore once it has been extracted from the mines. In the following article details are given of the huge Canadian-designed installations which will effectively deal with 10,000,000 tons of iron ore per annum, serving both as a storage depot and as a shipping and railroad terminus from which the iron ore can be transported by land or river to steel centres in Canada and the United States.

The first shipment of iron ore is expected from the open pit mines of Iron Ore Co. of Canada at Knob Lake and Burnt Creek in 1954. Initially an output of 10,000,000 tons per annum is aimed at, later to be stepped up to an annual rate of 20,000,000 tons. When this important milestone in Canadian mining history eventuates, the ore will be carried over 360 miles of newly-built railroad from the Labrador-Quebec iron fields to the small settlement of Seven Islands on the north shore of the St. Lawrence, where one of the most modern and efficient ore storing and loading systems ever conceived will be built.

The great ship-loading units and the stackers which will build up the stockpile of ore are of unique design and of a type which have never before been constructed. Their design, as well as that of the whole storing and loading system, is entirely of Canadian origin and the complete task has been engineered by Stephens-Adamson Manufacturing Co. of Canada Ltd., at Belville, Ontario. It is pointed out in *The Northern Miner*, from which the material for this article has been taken, that Stephens-Adamson secured the contract in the face of severe competition as it was the only company that was in a position to tender bids for the design and the fabrication of the complete layout.

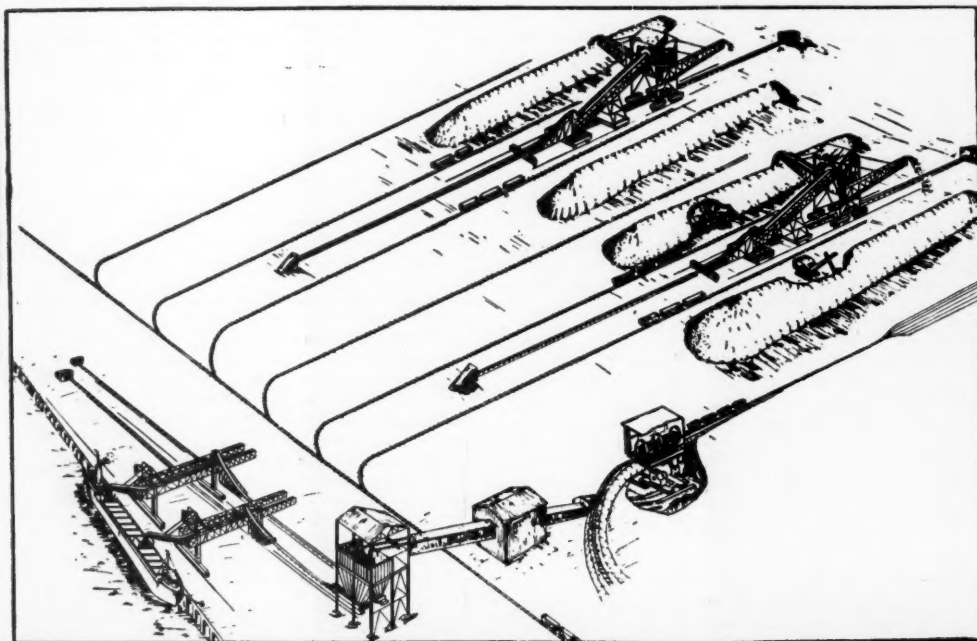
From the open pit mines the ore will be hauled in trains of a 100 cars each. These cars will have a minimum capacity of 80 tons and a maximum capacity of 90 tons. On their arrival at the Seven Islands, they will be

diverted to the classification yards, where various train loads will be lined up to ensure that the proper grade of ore is sent to the ships or to the stockpile.

It is at this point that the stockpiling and loading system comes into operation.

In brief, the function of the stockpiling and loading system is either to send the ore through to one of the four stockpiles, each capable of containing 440,000 tons, shown in the diagram below, or to load it directly on to the ships. The system is, of course, also designed to pick off the ore from the stockpile and convey it to the ships. When unloading the ore on the stockpiles the rated capacity of the equipment is 6,000 l.tons per hour, but when unloading directly into the ships the equipment has a rated capacity of 8,000 l.tons per hour. These figures for the tonnage capacity are based on the assumption that the iron ore will weigh 135 lb. per cu. ft. However, the drives, motors, and all the equipment would be capable of dealing with the same volume of ore even if it weighed 150 lb. per cu. ft., that is, 8,800 tons or an increase of 10 per cent provided that it did not occupy greater space.

To transport the iron ore by the St. Lawrence, the ships will tie up at an 800 ft. long dock now under construction. Roughly, their tonnage will vary from 2,000 tons to 30,000 tons capacity and will be loaded at an average rate of 6,500 tons per hour. This conservative loading rate figure makes allowance for any delays that may be



The Seven Islands Ore Loader

By courtesy of "The Northern Miner"

encountered if cars are not available at any given moment and for working time lost when the ship loaders are moving from hatch to hatch.

Under ordinary conditions the ore trains will be assembled in the classification yard and the cars will be dumped directly into the ship loading system. By means of a Barney Hoist the trains will be raised two cars at a time to the Tandem car dump, which swings the cars upside down and drops the ore into two lump breakers. The empty cars will return by gravity to the empty car yard.

The lump breakers are provided to take care of frozen ore when this is received from the mines or when reclaiming from the stockpiles in the late fall or early spring. If the ore does not need crushing it bypasses the lump breakers and goes direct to the two hoppers under each Tandem car dump. These hoppers will have a capacity of five to six cars each where it is estimated that considerable mixing of the ore will be accomplished. Manganese steel feeders, with variable speed drives, will withdraw the ore from these hoppers and deliver it either to the stacking out system or to the ship loading system.

If the ore is to be stockpiled it feeds on to one of the two outhaul conveyors which lead to the two main stacker belts. These two conveyors, each 4 ft. wide and operating at a speed of 550 f.p.m., will be housed in an underground tunnel which is 489 ft. long to the first main stacker belt and 887 ft. to the second. The outhaul conveyors discharge on to the two main stacker belts which are also 4 ft. wide and operate at a speed of 55 f.p.m. The main stacker belts are over 2,300 ft. long and, after rising to surface, each travels on a line between two of the stockpiles. The stackers themselves, which are the key to the stockpiling operation, have a travel of about 2,000 ft.

BIG STACKERS PILE ORE

These stackers are of a huge size for a moving mechanism. Overall, they are each about 200 ft. long, rise to a height of 60 ft. above the ground and weigh over 300 tons. When discharging ore these huge mechanisms will move up and down between the stockpiles at a speed of 50 f.p.m., but, if it is desired to move them a comparatively long distance with no load, they can travel at a speed of 100 f.p.m.

The main stacker belt is threaded into the stacker where a travelling tripper discharges the ore on to elevating conveyors, and continues through to a head pulley located at the end of the stockpile. These elevating conveyors lift the ore to two wing conveyors which stick out on each side of the stacker for a distance of 100 ft. From the end of the wing conveyor, 68 ft. above the ground, the ore drops on to the stockpiles which will have a maximum height of about 50 ft. Both the elevating and wing conveyors are 4.5 ft. wide and operate at a speed of 575 f.p.m.

The four storage piles will have a capacity totalling 1,720,000 tons. Under the present design, each pile will be about 2,000 ft. long but the stacker belts are so designed that the stockpiles can be extended another 550 ft. by merely extending these conveyors. This would increase the storage capacity by over 25 per cent.

SHOVELS SCOOP UP 14½ TONS

To reclaim the ore from the stockpiles huge, 8 c.u. yd. electric shovels will be used. These shovels, lifting 14½ tons with each scoopful, will load into railway cars which will be routed around the to classification yard so that the ore can be introduced into the normal ship loading system.

The loading arrangement is such that various grades of ore can be thoroughly mixed or any one grade can be loaded directly into the ships when this is required. For loading ships the two manganese steel feeders under the Tandem car dump will deliver to two 5 ft. wide outhaul conveyors, travelling in an overhead conveyorway 590 ft. to the dock. These belts, operating at a speed of 600 f.p.m., discharge into two 1,000 ton mixing bins at the dock. These bins are so arranged that any one grade of ore can be directed into the ships, or all grades can be mixed. Manganese steel feeders under the bins feed on to two dock belts. These belts, each 5 ft. wide and operating at 525 f.p.m., have a maximum travel of 677 ft.

SHIP LOADING UNITS

The two ship loading units constitute another piece of original design. They are not quite as big an animal as the stackers, but nevertheless are of pretty big size. They weigh over 210 tons apiece and rise to a height of about 45 ft. above the ground. They have a horizontal length of about 85 ft. and ride on tracks which are spaced on 70 ft. centres. Beyond the track there is a rear projection of about 38 ft. and at the other end a projection over the dock of about 20 ft. Each unit travels along the length of the dock for a distance of 514 ft. and can move at a rate of 150 f.p.m.

The two ship loaders consist of a main bridge which traverses longitudinally along the dock. Attached to this bridge is a tripper for discharging the dock belts on to shuttle boom belts. The shuttle boom unit travels back and forth inside the main bridge. Its outer end constitutes a boom which can be raised or lowered to suit various loading conditions and sizes of ships. The boom sections are 65 ft. long and the belts are 5 ft. wide operating at a speed of 600 f.p.m. These boom shuttle belts have an increased capacity to accommodate loading conditions when the bridges are travelling in the opposite direction to that of the two dock belts.

All motors will be 550 volts, three-phase, 60 cycle, with unit substations provided to reduce from the main line voltage of 4,160.

Canada—1951

This illustrated Official Handbook (price 25c.) which is prepared by the Dominion Bureau of Statistics, Department of Trade and Commerce, Ottawa, was initiated in 1930 to supplement the *Canada Year Book* by offering a brief and attractive record of economic conditions in Canada at a price within the reach of all. Indeed, for a very low outlay, the reader obtains an interesting, beautifully illustrated book which gives particulars about the people, government and economy of Canada. "The past decades have," as the Rt. Hon. C. D. Howe, Minister of Trade and Commerce, points out in a foreword, "seen expansion of the national economy in every direction," and the task of giving a well-balanced presentation is becoming more difficult each year, but the compilers have again produced a book which may be considered a model of its kind. The weight of emphasis is being placed from year to year on those aspects that are currently of most importance, since there is not space to deal adequately with all. The leading special articles in this edition deal with "Our Last Frontier—the Canadian North" (containing a section on mining) and "Moving Alberta's Black Gold to Market." There are again interesting chapters on Mines and Minerals, and Water Powers (including a map of the water-storage system related to hydro power developments of the St. Maurice Basin).

Bechuanaland—the Development of its Mineral Resources

By A. G. THOMSON

As stated elsewhere in this issue, this is the first of several articles which will appear in the following months dealing with mineral developments in the Colonies. In this article, the author surveys the potential and actual mineral wealth of Bechuanaland and focuses attention on the part played by both public and private enterprise in developing these resources.

Occupying an area of approximately 275,000 sq. miles, the Bechuanaland Protectorate is bounded on the south and east by the Union of South Africa, on the north-east by Southern Rhodesia, on the north by the Zambezi and Chobe Rivers, and on the west by the territory of South-West Africa. Shortly before the war it had a population of about 265,000, of which less than 2,000 were Europeans.

This territory was proclaimed a British Protectorate in 1895, after consultation with the principal chiefs, at a time when the Germans threatened the country from the west and the Boers were invading it from the east. In the South Africa Act of 1909, provision was made for the potential transfer of Bechuanaland to the South African Government, along with the other High Commission Territories of Basutoland and Swaziland, subject to certain conditions intended to safeguard the interests of Native populations. Southern Rhodesia is also interested in the future of the Bechuanaland Protectorate, for part of this territory once belonged to the Matabele, by whose chief, Lobengula, it was included in concessions granted to Rhodesian pioneers.

MINING HISTORY OF PROTECTORATE

The Protectorate has a mining history which goes back to 1865, when H. Hartley, during a hunting expedition, came across traces of ancient diggings. Hartley invited the famous explorer, Karl Mauch, to accompany him on an investigation of the area, and the following year, the two men established the existence of a goldfield 80 miles long by two or three miles broad. Prospectors flocked to the Tati district and joint stock companies and syndicates were formed in London and elsewhere.

By the end of 1872, between 1,500 and 2,000 oz. of gold were reported to have reached Britain from Tati. Only two or three companies survived, however, the most notable being the Tati Concession Mining and Exploration Co., Ltd., which was formed in 1888 under the laws of the Cape Colony. In 1895, Tati Concessions Ltd. was registered to acquire this undertaking. The latter concern was reconstructed in 1914 and became the Tati Co., Ltd. This company still owns the Tati Territory, with all mineral, afforestation, agricultural and trading rights. The original area of this territory was 1,324,191 acres. In 1922, it was agreed to transfer 200,000 acres to the Bechuanaland Exploration Co. The Tati Co. has established several stores and carries on a general trading business, revenue being also obtained from prospecting and claim licences, sales of timber, etc.

Tati Goldfields, Ltd. was registered in London in 1934 to work with the Amelia and Monarch properties, and for a number of years was a vigorous producer. By 1944, however, its ore reserves had fallen to only 69,259 tons, values at depth were negligible, all possibilities of finding further payable ore were reported to have been explored and shareholders were warned that the life of the mine was almost at an end. Mining operations have since been suspended.

GOLD PRODUCTION

In modern times gold production in Bechuanaland has been confined to the Tati district, except for operations on a small scale carried on by the North Charterland Explora-

tion Co. in the Kgwebe Hills south-west of Lake Ngami. The gold occurs in quartz veins and has been extracted from gold-bearing rubble. The goldfields are three in number and extend intermittently for about 60 miles.

From July, 1895, up to the end of November, 1943, the total gold output in the Tati area amounted to 279,785 oz. valued at £1,683,361. By the end of 1948 it exceeded £2,000,000. From 11,200 oz. in 1945, however, production in the Protectorate declined to 7,400 oz. in 1947, 1,500 oz. in 1948, and only 264 oz. in 1950.

Other than gold there has until recently been virtually no production of minerals in Bechuanaland. A deposit of asbestos in the Bangwaketse Reserve was worked for a short time on a small scale, but prospects were not considered sufficiently promising to form a company and the mine was soon closed down.

Under the Mines and Minerals Proclamation Act, promulgated in 1932, mining and prospecting within the Protectorate were brought for the first time under legislative control, the Tati Territory being excluded from the provisions of this Act.

The British South Africa Company owns mineral rights over large areas of the Protectorate. In 1892, this company transferred its rights in regard to diamonds to De Beers, whose prospecting operations in Bechuanaland have so far produced few results. Under the Mining Proclamation the British South Africa Company pays £1,750 per annum for prospecting rights over 35,000 sq. miles in the Bamangwato Reserve and £750 for 15,000 sq. miles in the Bakwena Reserve. In addition, it contributes to the relevant tribal funds. In the event of mining being commenced in either reserve, the tribal fund would receive a royalty of 1 per cent on the value of the output.

The situation in Bechuanaland was complicated by the existence of a number of concessions obtained directly from Native chiefs, one at least of which has been a source of dispute between different tribes. Generally speaking, the policy represented by the Mining Proclamation aims at fostering the development of the territory's potential mineral resources, while at the same time liberating the Protectorate from concessions of an indefinite nature and substituting concessions granted for a limited period only.

GEOLOGICAL SURVEY UNIT ESTABLISHED

Important developments may result from the recent establishment of a Geological Survey Unit in the Bechuanaland Protectorate. At the head of this unit is Mr. E. J. Wayland, C.B.E., A.R.C.S., M.I.M.M., F.G.S. After being for many years Director of the Geological Survey of Uganda, Mr. Wayland was appointed to investigate the water supply problems of Bechuanaland; water being of critical importance to this large and sparsely populated territory which contains many arid regions. Later, it was decided that, in spite of the considerable amount of exploration which had taken place, there were still favourable prospects for minerals development, particularly in view both of the high prices now ruling and of the demand for many minerals which formerly had little or no commercial value. Bechuanaland was, therefore, given free grants totalling £128,500 for the first five

years of a geological survey scheme, covering the period 1948-1953. Five additional geologists have been appointed, several of whom were trained in Universities of the Union of South Africa.

Exploration is complicated in certain areas by the sand of the Kalahari Desert which adds to the difficulty of discovering any possible outcrops. In areas where the rocks are not masked by sand or soil, however, considerable assistance can be given to the field work by means of aerial photographs. The selection of areas for photo-geological work is dependent, to some extent, on the existence of topographical maps to which the geological interpretations may be transferred. There is, at present, a shortage of good topographical maps of the Bechuanaland Protectorate, but eventually these will be provided by the Colonial Survey (Geodetic and Topographic) under Brigadier Hotene. Air photographs of some of the relatively featureless country of Bechuanaland have shown interesting indications of geological character and trial mosaics have been constructed, both for the purpose of portraying them and of determining the usefulness of a mosaic as a substitute for a topographical map. The Director of the Survey has reported that the mosaics will be of great value for the purpose of preliminary geological mapping, particularly since they reveal many features which are not obvious from the ground.

Gold seems to be widely distributed in Bechuanaland, but outside the Tati Territory it has seldom been found to occur in economic quantities. A detailed investigation of the Tati Goldfields mines is being undertaken by the survey and there are some grounds for the hope that a revival of a gold-mining industry in this area may prove practicable.

ASBESTOS AND KYANITE SHIPMENTS

The activities of the Bechuanaland Survey have already led to the export of both asbestos and kyanite. Chrysotile asbestos was first discovered in Bechuanaland about 20 years ago at Moshanena, near Kanye, and a number of other occurrences have been reported, some of which are now being followed up. Drilling and sinking for asbestos were started by the Survey at Kakia, near Naka la Phala, in the Serowe district, but operations have been temporarily suspended. Some excellent material has been produced at Machaneng, where some 2½-in. fibre has been discovered. This asbestos mine is being run as a tribal or village industry. It has become clear, however, that the venture cannot pay when worked under the limitations which the present scheme must necessarily impose. Some asbestos which may be worth following up has also been found in the Tati area.

Kyanite, an aluminium silicate used for refractory purposes, is generally marketed as sillimanite. Formerly, India was the main source of supply, but existing conditions in that country have created an opening of which Kenya, in particular, is taking full advantage. Kyanite has been found also near Bobonong in Bechuanaland. The quality is excellent, but the quantities have yet to be established. This mineral is already being exported on a limited scale.

COPPER DEPOSITS

Various copper minerals have been discovered in the eastern and northern parts of the territory. In almost every case gold is associated with the copper, but in very small amounts. In addition, there are three known copper prospects which merit attention. The Survey are examining copper deposits about seventy miles north-west of Francistown, on which are situated the Bushman Mine and Outlaw claims. The Bushman Mine closed down many years ago on account of the fall in copper prices, transport difficulties, etc. A grab sample from the abandoned dump gave the astonishingly high value of 17 per cent Cu. Exploration

has shown that the Bushman and Outlaw occurrences are situated on a shear zone which has been traced for more than twenty miles. In appropriate places surveys have been made and a drilling programme has been devised. Also of possible significance are the Selkirk and Rainbow deposits, both in the Tati Concession area. The Rainbow Mine has hitherto been worked entirely for gold, the copper minerals being discarded.

COAL MINING POSSIBILITIES

Bechuanaland should be rich in coal, for previous work has shown that a very large part of the Waterberg Coalfield lies within the Protectorate, its extension being known as the Bakhatla Coalfield. To the south-west of this area is another large elongated incline dipping gently, in which boreholes and wells have struck coal. Further north in the Palapye-Serowe area a third coalfield exists. Borehole evidence has shown that Karroo rocks, not necessarily coal-bearing throughout, extend about 160 miles to the north-west of Palapye, in which direction the coal, if present, lies deeper. There are other large areas in which Karroo rocks play an important part. The exploration of the Palapye and Bakhatla coal fields is being vigorously undertaken by the Survey. The relative shallowness of the seams appear to offer attractive possibilities for the establishment of a coal-mining industry.

Some promising bedded iron ores have been found in the Shushong area. They are apparently of Karroo age and seem to constitute a new type of deposit for that system. A somewhat similar occurrence was found at Naka La Phala, where high grade haematite-magnetite replacement ores also exist.

Other minerals known to occur in the territory include barytes, a variety of building stones, lime, feldspar, fluor-spar, Iceland spar, galena, manganese, mica and vermiculite. The presence of these minerals in commercial quantities and quantities has yet to be established. No radio-active minerals have yet been discovered in the Protectorate. Apart from the search for minerals, attention continues to be devoted to underground water conditions. Research is also being conducted into problems raised by the study of the Gaborones granite, the Kalahari sand, etc.

Portugal

(From Our Own Correspondent)

Oporto, December 12

With the approach of the end of the year it is possible to forecast broadly Portuguese production during the year. Figures of cupreous pyrites and wolfram should show some increase while manganese, iron ore and white arsenic which are of less importance, should show very considerable increases; tin concentrates, however, will show a reduction. A new development in this trade was the export to Brazil of 70 tons of black tin during October. It is said that a contract exists for some 150 tons.

Exporters of low grade WO_3 and mixed WO_3/Sn residues are faced by fresh trouble owing to the requirement that the full export duty of Esc.40.00 must be deposited until the official analyst has checked the wolfram contents of the material. How long the exporter is expected to wait for the return of his deposit, which incidentally is not due on material running less than 25 per cent WO_3 , seems indefinite, although efforts are being made to clear up this unnecessary tangle.

Exports for the first ten months are as follows (in tonnes): Wolfram concentrates, U.K. 1,760; U.S.A. 1,135; Sweden 47; Germany 20; Belgium 12; Italy 11; elsewhere 15. Tin concentrates U.K. 374; Spain 137; Brazil 70; U.S.A. 29. Cupreous pyrites 460,594. Manganese ore 8,715. White arsenic 502 tonnes.

New Austrian Steel Making Process

Further details of the important new Austrian steel-making process, to which a brief reference appeared in *The Mining Journal*, November 9, were made public at the congress of the Austrian iron and steel producers, held at Leoben, Styria, recently. This new process is to be used in both the new steel works under construction in Austria, one at the Linz and the other at the Donawitz iron and steel works.

According to a Reuter despatch from Vienna, in the new process, a stream of oxygen is introduced through a water-cooled pipe into the converter from above; this contrasts with the Bessemer process, where the oxygen is forced through the molten metal in the Siemens-Martin furnace. A reaction centre forms at the point where the stream of oxygen impinges on the molten charge and from this centre, reaction gases set up a progressive circulation through the mass. The downward pressure of the incoming oxygen stream prevents the carbon monoxide formed during the process from escaping towards the mouth of the converter. The circulation set up by the reaction gases continues until all the carbon in the charge is consumed.

Steel produced by this new process is claimed to be remarkably free from inclusions of gas or oxygen and to have a very low sulphur and phosphorus content. Called "LD-steel," it is comparable with Siemens-Martin steel and even far superior in some of its properties. Not least important is the claim that only a very small amount of scrap is needed in its manufacture.

The Linz works began experimenting with the new method in the summer of 1949 and applied it first in a two-ton and, later, in a 15-ton converter. Some 269 tests resulted in the production of 2,000 tons of steel of a large number of types.

It is claimed that the method not only guarantees the production of high-quality steel, but it is also economically sound.

Alcup—A German Bi-Metal

The manufacturers of the bi-metal Alcup, Vereinigte Silberhammerwerke Hetzel & Co., Nuremberg, state that their raw material supplies are sufficient to meet present requirements. Though numerous orders have been booked with them, delivery periods are extremely short. Alcup, which is sold in Germany under the name Cupal, is a copper-aluminium combination which was recently exported to the U.S. for the first time and is expected to relieve the copper shortage there.

Cupal has been used in Germany for more than 20 years. A copper coated aluminium, it is claimed to combine the advantages of copper and aluminium and, through its use, considerable quantities of copper can be saved. It is produced in sheets and strips and is chiefly used in the electrical industry, though it is also suitable for other purposes, such as roofing. It has the high-level conductivity of copper, while the aluminium core results in a much lighter product.

New Australian Method to Deal With Crushed Seals

A new method to deal with crushed seals is to be tried at a colliery at Cessnock, writes our Australian Correspondent. The seals in the fire area will be stowed with earth and mudstone, available in the mine. Stowage will be placed on the out-by side of the brick seals which are being crushed and will form a tight pack which would become tighter as the crush became greater, giving an extra good seal. The method will be rather costly, but the cost may be described as negligible in relation to the value of the coal involved.

Metallic Uranium Production at the Bouchet Plant

A method for the production of metallic uranium used by the Commissariat of Atomic Energy has recently been described by Eichner and co-workers, (*Bull. Soc. Chim.*, 1951, 140). The crude uranium oxides are dissolved in nitric acid and, after filtering, the solution is saturated with ammonium nitrate, the uranyl nitrate formed being extracted with ether. The uranium is then precipitated hot as the tetroxide with hydrogen peroxide. The tetroxide is converted to the trioxide by heating at 250-300°C. and this in turn is converted to the dioxide at 650°C. with a 1:4 mixture of hydrogen and nitrogen. The dioxide is converted into the tetrafluoride with hydrofluoric acid, the reaction being carried out in 100 kg batches in ebontite lined containers. The product is filtered through polyvinyl filter cloth and dried, first in air at 200°C. and then in hydrogen at 500°C. The uranium tetrafluoride is then reduced with calcium shavings in a fluorite lined, stainless steel container. After reaction the mixture is cooled in argon for 48 hours. The uranium is obtained by this process in ingots of approximately 40 kg.

Belgian Coal Gasification Experiments

Subterranean gasification experiments made in three coal mines in the Liège region of Belgium have not yielded positive results, states a Reuter message from Brussels. The calorific value of the gas obtained did not exceed 500 calories per cu. metre, while the maximum of heat recovered did not represent more than 35-45 per cent of that which the fuel provided. However, these results cover only the first stage of the experiments, which started in February/March, 1948. The results of three later experiments will be described in a report yet to be published. The experimental gasification was carried out by a co-operative company, subsidized by the Belgian Government. Up to now, the costs of the experiments amount to 75,000,000 Belgian francs.

The Utilization of Underground Water Supplies

In the coalfield area of Durham there is an increasing demand for water which cannot be readily met by the existing water-bearing strata. Colliery workings obviously afford a useful supply of water, always provided that it can readily be purified. Sometimes the water contains chemical constituents which do not permit of ready removal, but at New Brancepeth a treatment plant has been set up in order to render waste colliery water suitable for public use. The water contained 1,386 p.p.m. of residue, 252 temporary hardness, 0.3 iron and 0.7 manganese. The iron may be removed by aeration and the manganese by first oxidizing it with chlorine and then filtering. Details of this interesting experiment have been given by W. G. Carey & J. H. Mawson, (*J. Inst. Water. Engrs.* 5, 306, 1951).

Alloying Magnesium with Non-Ferrous Metals

A process, claimed to make possible the alloying of magnesium with non-ferrous metals, has been patented by Messrs. Guy E. McKinney and Paul J. Motter, of Canton, Ohio. Because pure magnesium normally burns violently at temperatures at or above 1,000°F., it cannot be put into molten iron or steel without exploding and volatilizing. Under the process now patented, the magnesium is covered with pulverized fire clay so fine that it excludes air and is heated until it melts. More clay is added to the magnesium and the mixture is then added to the molten ferrous metal. The resultant mixture consists of magnesium and magnesium oxide.

Metals, Minerals and Alloys

An increasingly serious view is being taken on the outlook for the steel industry in the United States. Mr. Murray regards a nation-wide strike after December 31 as unavoidable. He stated that the unions will not work without a new agreement. Mr. Murray is asking for a 15c.-per-hour increase to wages and the Wage Stabilization Board's formula which would only permit a 5c. increase has been rejected. The U.S. Price Director, Mr. DiSalle has also stated that price increases would not be granted unless they can harmonize with the Economic Controls Law. *The Iron Age* says it is a safe bet that Mr. Murray will risk a strike.

Some further indication of a reaction against the rolling-back of metal prices by the United States Metal Administrators is afforded by the O.P.S. removal of price controls on domestic antimony, graphite, synthetic crystals, fluorspar, soapstone, serpentine and building stones, etc., with a view to encouraging domestic production of metals and minerals.

Copper.—There is nothing fundamentally fresh regarding copper this week. The Copper Institute gives the U.S. output of crude in November as 82,913 tons (87,896 in October). Refined totalled 103,614 s.tons (104,148 in October). Domestic deliveries were again high, being helped out by stockpile withdrawals, and amounted to 123,746 s.tons (125,286 in October). The excess of deliveries over production and stockpile withdrawals reduced stocks of refined to 68,160 s.tons (78,192 in October). Outside the U.S. production of crude was 121,549 s.tons (122,543 in October); refined totalled 103,141 s.tons (115,825). Refined stocks at the end of the month were computed as 166,640 s.tons (170,477, end October). The strike at the Hayden Smelter continues. It is reported from Northern Rhodesia that owing to coal shortages the smelters will be down for four days at Christmas.

The International Materials Conference has let it be known that the copper-zinc-lead committee has decided for the present against any provision for stockpile requirements for copper in view of the "terrific" demand for essential needs.

Portugal has promised export licences for 7,500 tonnes of copper to Sweden. Reports from Santiago say that Chile will shortly sell some 3,000 tons of copper to Pakistan. French buyers have contracted for 1,700 tonnes of Japanese copper.

The Australian price to producers has been advanced retrospectively from Nov. 21 to £A.270 (+£20) a ton. Consumers will continue to pay £A.285.

Lead.—A declining trend in prices is believed in New York to be bringing world price down towards the U.S. ceiling. N.P.A. officials told the Advisory Committee of the Wire and Cable makers last week that they thought the lead situation was likely to improve during the early part of 1952. Shipments of lead to cable-makers during the first ten months of the year are computed as 58,881 s.tons compared with 53,626 in the same period last year. Any improvement in supplies must clearly result from stockpile withdrawals as U.S. imports of refined lead in the first ten months were only 146,095 s.tons against 348,555 in the same period of last year. The strike at the Herculaneum smelter persists. Imports of matte were 56,221 s.tons (55,273).

Some foreign lead is said to have been sold as low as 19c. f.a.s. Gulf basis, thus with freight costs roughly 3c. the gap is now not large, and an active American demand

is awaiting parity. Moreover, it is generally thought that the Senate will give the suspension of the import duty priority in its agenda when it re-assembles. The Bill has already been passed by the House.

Reuter reports from Copenhagen that the results of the Swedish and Canadian laboratory tests of ore from Messtergig in East Greenland having proved satisfactory, a Danish company is to be formed shortly to exploit the deposits, estimated at present to amount to at least 400,000 tons the lead-zinc content of which is stated to be very high. Initial capital will be Kr. 10,000,000 and if the deposits yield up to the assay indications this may be raised to Kr. 100,000,000.

Tin.—In the absence of any certain indication of American policy in regard to tin purchases and influenced also by the uncertainties as to the effect of the partial freeing of sterling exchange, tin prices have tended to sag; quotations in France have temporarily been suspended. The U.S. tin mission has now returned to the States where it is claimed that both the Indonesians and the members of the mission were optimistic on the prospect of a settlement, and that the talks were to be continued in Washington. In Singapore, however, reports were less favourable and represented the Indonesians as evasive. The report of the mission has now been presented to the U.S. Government and it is believed will largely influence its future policy on tin purchases. The latest report is that Mr. Acheson may intervene to endeavour to solve the deadlock between the R.F.C. and the Bolivian Government. It is also expected that he will ask Mr. Truman to intervene on the question of drawing on the strategic stockpile. The Department of Agriculture is now said to be supporting the Defence Department in resisting raids on the stockpile.

Bolivian exports in November after declining almost regularly since May improved sharply in October to 3,393 tons making the total for the ten months 28,165 tons compared with 25,528 tons in the same period last year. As it does not appear that any Bolivian concentrates are going to Texas we must suppose either that they are being shipped to Liverpool or being warehoused on the Pacific coast.

Imports of concentrates into the Straits in November were 803 tons: Thailand 654, Burma 92, other countries 57 tons.

Aluminium.—The U.S. Defence Mobilizer, Mr. Wilson, predicts that expanded aluminium production will be necessary even after the present emergency, in order to meet the huge backlog of demand for civilian goods and because of the probability of many new markets opening up. He foresees the metal being widely used as a substitute for copper. It is disclosed from Paris that French interests purchased 4,000 tonnes of aluminium from Japan during the summer and the metal is now affloat.

Objections to the Anaconda-Harvey Aluminium Company's plan to construct a 72,000 s.ton aluminium production plant at Calispell, Montana, have been overruled by Mr. Fleischmann who has directed the Secretary to the Interior to provide the necessary electric power from the Hungry Horse Dam. He also indicated the probability that a new aluminium expansion programme would be approved. "Military Services," he said, "have presented substantially larger requirement figures than had hitherto been put forward," in addition a new expansion programme may be approved. The French output in November was 7,261 tonnes (7,736 in October).

Nickel.—The International Nickel Co. forecasts the world output this year at around 147,500 s.tons, 10 per cent more than last year. Figures for Russia are of course not available. Production should be 30 per cent higher

by 1954 as compared with the pre-Korean war supply. Towards this Inco had added to its annual capacity by 6,000 tons by July last. Projected increases by the Nicaro, National Lead, and Le Nickel have been noted in *The Mining Journal* earlier. As with other metals, shortage of scrap supplies is a stimulating factor for increased output.

Tungsten.—The International Materials Conference in Washington has now received replies from the Member Governments to which the long-term market plan of the tungsten-molybdenum committee, referred to last week, was sent. As expected, producers find it unacceptable and negotiations to meet the differences are now proceeding and may last for some weeks. Under the new Swedish-Portuguese Trade Treaty, Portugal undertakes to grant export licences to Sweden for 350 tons of wolfram concentrates during 1952.

In the absence of any statement regarding the outcome of the Washington Conference business in the U.K. is at a standstill. There is, however, a small business passing on the Continent at 515s./525s. c.i.f.

Gold.—The Transvaal output in November was 964,818 f.oz. which compares with 977,652 oz. in October and 952,048 oz. in the corresponding month last year. Gold production in Columbia continues on an improved scale; the August output was 42,980 f.oz. bringing the total for eight months up to 300,958 oz. against 257,094 for the same period last year.

The Australian Gold Producers' Association has made its first sale of premium gold.

The London Metal Market

(From Our Metal Exchange Correspondent)

Except for a relatively sharp fall on the morning of last Tuesday which was recovered by the end of the afternoon, the London Tin Market has fluctuated within very narrow limits, and the main feature has been the reduction in the backwardation which was almost completely eliminated last Monday. The sudden dip on Tuesday was due to a very weak overnight market in the East which was ascribed to the eastern miners reaction to the week-end announcement on the new Foreign Exchange dealings in London, which was at first thought to promise a weakening of the pound to such an extent that it would be better to hold the metal but this was proved a false deduction by the close of business on Monday.

Consumer demand is still dull and nothing more has been heard from America although the Malayan Mission has now returned and submitted its report; rumours that the Bolivian negotiations are likely to be re-opened appear to be somewhat premature.

Although some publications seem to think that the re-opening of the Foreign Exchange Market in London should ease the way for the re-opening of the commodities market this view is not shared on the Metal Exchange, as the main problem of the dollar-drain is in no way altered.

The rooms of the Metal Exchange will be closed after the morning market on December 24 and re-open on Thursday, December 27, and in accordance with tradition will remain closed all day January 1, 1952.

On Thursday the official close on the tin market was: Settlement price £920, Cash Buyers £917 10s., Sellers £922 10s.; Three months' Buyers £912 10s., Sellers £915. In the afternoon the market was steady. Turnover for the day was 210 tons. Approximate turnover for the week was 730 tons.

The Eastern price on Thursday morning was equivalent to £905 2s. 6d. per ton, c.i.f. Europe.

Iron and Steel

In anticipation of the holidays next week, special efforts have been made to assemble maximum tonnages of fuel, ore, and scrap at the steel plants this week and also to clear the outputs of the blast furnaces and rolling mills. These efforts, moreover, have been favoured by climatic conditions. Fears of a winter fuel crisis have thus far been averted, power cuts have not yet been imposed to any serious extent and rail transport facilities have been most satisfactory.

It may still be premature to assert with any degree of confidence that the shrinkage of iron and steel production has been arrested, but the outlook appears to be more favourable. Scrap is still the most serious bottleneck and it is manifest that the new scrap drive to be launched in 1952 will have to be prosecuted with the utmost vigour. But it is encouraging to observe that there was a substantial improvement in the tonnage of iron and steel manufactured last month. Pig iron production exceeded the rate of 10,000,000 tons per annum for the first time this year.

DECEMBER 20 PRICES

COPPER

Electrolytic... .. £227 0 0 d/d

TIN

(See our London Metal Exchange report for Thursday's prices)

LEAD

Soft foreign, duty paid £175 0 0 d/d
Soft empire, including secondary lead ... £175 0 0 d/d
English lead £176 10 0 d/d

ZINC

G.O.B. spelter, foreign, duty paid ... £190 0 0 d/d
G.O.B. spelter, domestic £190 0 0 d/d
Electrolytic and refined zinc £194 0 0 d/d

ANTIMONY

English (99%) delivered,
10 cwt. and over £365 per ton
Crude (70%) £290 per ton

NICKEL

99.5% (home trade)... .. £454 per ton

OTHER METALS

Aluminium, £124 per ton.	Palladium, £8 10s. oz.
Bismuth, 28s. lb.	Platinum (scrap), £33.
Cadmium, 18s. 9d. lb.	Platinum, £27/33 5s. nom.
Chromium, 6s. 3d. lb.	Rhodium, £45 oz.
Cobalt, 17s. 6d. lb.	Ruthenium, £30 oz.
Gold, 248s. f.oz.	Quicksilver, £73 10s./£74
Iridium, £65 oz. nom.	ex-warehouse.
Magnesium, 1s. 6d. - 2s. lb.	Selenium, 25s. nom. per lb.
according to quantity.	Silver (bar), 77d. f.oz. spot
Osmiridium, £35 oz. nom.	and forward.
Osmium, £70 oz. nom.	Tellurium, 19s. lb.

ORES, ALLOYS, ETC.

Bismuth	65% 18s. 3d. lb. c.i.f.
	60% 17s. lb. c.i.f.
Chrome Ore—	
Rhodesian Metallurgical (lumpy)	£13 per ton c.i.f.
" " (concentrates)	£13 per ton c.i.f.
" " Refractory	£12 12s. per ton c.i.f.
Baluchistan Metallurgical ...	£13 18s. 6d. per ton c.i.f.
Magnesite, ground calcined...	£26 - £27 d/d
Magnesite, Raw	£10 - £11 d/d
Manganese, Best Indian ...	(Nominal)
Molybdenite (85% basis) ...	103s. 1½d. per unit c.i.f.
Wolfram (65%), U.K. ...	515/525s. nom. c.i.f.
Tungsten Metal Powder ...	35s. nom. per lb. (home)
(for steel manufacture)	
Ferro-tungsten	33s. nom. per lb. (home)
Carbide, 4-cwt. lots ...	£30 3s. 9d. d/d per ton
Ferro-manganese, home ...	£41 8s. 2d. per ton
Ferro-manganese, export ...	Nom.
Brass Wire	2s. 7½d. per lb. basis.
Brass Tubes, solid drawn ...	2s. 1d. per lb. basis.

Company News & Views

B.O.M.A.'s Annual Report

The annual report of the British Overseas Mining Association for the year ended September 30 serves as a reminder of the important rôle which the Association plays in representing the views of its members, of which there are nearly 100, comprised of mining finance houses, consultants, mining, smelting and oil companies.

Col. C. E. Temperley, president of the Association, in his report to members briefly reviewed the Association's representations made during the year. A memorandum was sent to the Chancellor of the Exchequer in February last, drawing attention to the disparity between the taxation suffered by overseas mining companies resident here, and those resident abroad. Proposals were submitted to the Committee on the Taxation of Trading Profits (Tucker Committee) which produced satisfactory results, a number of the suggestions put forward being adopted by the Committee.

A memorandum was also submitted to the Royal Commission on Taxation and similarly to the Committee on the Taxation Treatment of Provisions for Retirement. Following the publication of the Finance Bill of 1951, the Association took steps to bring to the attention of the authorities concerned the "highly prejudicial effects on the overseas mining industry of the provisions of Clauses 28, 32, and 33 of the Bill dealing with the avoidance of liability to profits tax, the prohibition of a transfer of companies overseas and transactions between inter-connected companies." Additionally, the Association sent a memorandum to the Treasury soon after the publication in July last of the White Paper proposing control of dividends. This memorandum, which was given a good deal of publicity in the Press, urged that the British overseas mining industry be exempted from the ambit of the Bill foreshadowed in the White Paper.

In conjunction with the Institution of Mining and Metallurgy, the Association helped to arrange a course of lectures on mining for the benefit of the non-technical staff of London mining companies at the Royal School of Mines. The course was well attended and it is hoped, the president stated, to arrange a second course during 1952.

Wankie Breaks Records But Pays Less

The tonnage of coal mined and sold by Wankie Colliery during the year to August 31 last constituted records as did the percentage of the gross output sold to customers. But the large increase in costs, coupled with the inevitable time-lag in reaping the full benefits of higher coal prices cut deeply into the gross revenue so that after providing for all costs and expenses it was whittled down to £283,396 as compared with £337,869 in the preceding year.

Year to Aug. 31	Output tons	Sales Coal tons	Sales Coke tons	% sold to Customers	Proceeds Coal and Coke £
1950	2,280,102	1,944,521	104,575	85.28	1,260,991
1951	2,473,113	2,127,359	101,627	86.02	1,477,825

On the other hand, the tax liability of £100,000 was lighter than in 1950 when £130,000 was required, leaving the net profit slightly higher at £183,396 against £181,869. Nevertheless, after allocating £95,000 (£60,000) to tax equalization reserve, the amount available for dividends out of the year's earnings was only £88,396 or £33,473 less than in the previous year. Accordingly shareholders take a cut in their dividend from 7 per cent paid in 1950 to 5 per cent leaving the carry forward much the same at £41,965 against £40,440.

In connection with the dividend payment the directors point out that the profits available for this purpose would

have been less had not the Northern Rhodesian copper companies voluntarily agreed (notwithstanding their long-term contracts at a fixed price) to pay the same price for their coal supply as from April 1, 1951 as the Southern Rhodesian customers. It is also pointed out that the heavy capital programme for the expansion of the colliery has made good progress.

Last week the company announced that it is seeking Treasury permission to transfer its control and management to Southern Rhodesia. This decision follows the intimation expressed by the Southern Rhodesian Government that it would regard the transfer of Wankie to Southern Rhodesia as "most desirable." It will, therefore, be interesting to hear what Mr. Robert Foot, chairman, has to say on this matter at the annual meeting to be held on December 31.

Mufulira, Roan & R.S.T. Earn and Pay More

The preliminary statements of Mufulira Copper Mines, Roan Antelope Copper Mines, and Rhodesian Selection Trust for the year to June 30 last show steep advances in profits and bigger dividend distributions.

Mufulira Copper Mines is paying a final dividend of 1s. per £1 unit, less tax, making a total for the year on the increased capital equivalent to 8s. 3d. per share (last year 8s. 6d. actual, equivalent to approximately 5s. 1d. on present capital).

Roan Antelope has announced the payment of a final dividend of 3d. per 5s. unit, less tax, making a total for the year on the increased capital equivalent to 1s. 7½d. (last year 1s. 3d. actual, equivalent to 8½d. on present capital).

Rhodesian Selection Trust is recommending the payment of a final dividend of 3d. per share making a total for the year on the increased capital equivalent to 2s. per share (last year 2s. 6d. actual, equivalent to 1s. 6d. on the present capital).

	Year to June 30, 1951	Year to June 30, 1950
Mufulira		
Production of blister copper, 1 tons.....	86,681	77,048
Sales, 1 tons.....	83,681	69,350
Operating surplus	£8,969,133	£4,958,493
Administration, etc., and loan stock interest.....	£92,624	£81,758
Replacements and obsolescence	£1,000,000	£700,000
Taxation	£5,111,714	£2,570,563
Net profit	£2,764,795	£1,606,172
Brought forward	£183,016	£205,318
Amount available	£2,947,811	£1,811,490
Tax adjustment, previous year's.....	£10,000	
Loan stock redemption reserve.....	£35,700	£35,700
General reserve	£1,050,000	£450,000
Dividends	£1,764,577	£1,142,774
Forward	£87,534	£183,016

Roan Antelope		
Production of blister copper, 1 tons.....	74,520	63,557
Sales, 1 tons.....	74,520	62,059
Operating surplus	£7,290,422	£3,440,462
Administration, loan interest	£123,056	£105,929
Replacements	£1,250,000	£900,000
Taxation	£4,120,694	£1,615,594
Net Profit	£1,796,672	£818,939
Brought Forward	* £193,936	£160,557
Amount available	£1,990,608	£979,496
Tax adjustment, previous year's.....	£48,000	£52,000
Loan stock redemption.....	£51,000	£51,000
General reserve	£150,000	£100,000
Dividends	£1,546,632	£686,560
Forward	£194,976	£193,936

* Reduced since close of the year by £99,689 capitalized.

Rhodesian Selection Trust

Total income of Rhodesian Selection Trust for the year to June 30, 1951, amounted to £1,133,578 against £734,813. Net profit increased to £1,123,723 compared with £727,400 and the carry forward at the fiscal year end was left higher at £27,918 against £15,903.

Wiluna Gold Corporation to Wind-Up

In its report for the year to March 31, 1951, Wiluna Gold Corporation recorded a loss of £6,921 (£7,121) which, added to the loss of £14,378 brought in increased the debit balance on profit and loss account to £21,299.

On October 31 last, the corporation's wholly owned subsidiary, Wiluna Gold Mines, showed net liquid assets of £1,275,000 which included receipts from the disposal of the major portion of the company's plant, machinery, stores, and other assets. There remained further realizable items of machinery, stores, etc., having an estimated value of £60,000 and steps were being taken to dispose of these as soon as possible. The entire proceeds of the liquidation, subject to incidental expenses, of the company which was placed in voluntary liquidation on October 12 last will accrue to the corporation. The directors state that subject to unforeseen delay, it is anticipated that the winding-up will be completed within a reasonably short period.

Following the annual meeting held on December 20, there will be held an extraordinary meeting at which it will be proposed to place the corporation in voluntary liquidation.

Mr. R. E. Binns is chairman.

Company Shorts

Wheal Ellen Mine in Fork.—Cordery Mine has announced that the unwatering of the Wheal Ellen Mine has been completed to the 195 ft. level and that resampling is now proceeding.

Rustenburg Platinum Pays 160 per cent.—Rustenburg Platinum Mines for the year ended August 31 is paying a dividend of 160 per cent against 66½ per cent for the previous year. Net profit, after providing £199,980 (£58,116) for taxation was £1,776,919 which compares with £961,720 in the previous year. Stock realization reserve received £416,544 (£453,310). The sum of £361,882 (£125,256) was appropriated for capital expenditure. The dividend absorbed £969,600 (£404,000) leaving the carry forward higher at £199,840 against £170,940 previously.

Waterval (Rustenburg) Platinum which holds 39.2 per cent of the capital of Rustenburg Platinum Mines showed a net profit for the year to June 30, after deducting taxation charges of £60,645 (£35,824), of £100,231 which compares with the previous year's earnings of £71,314. The dividend payment was raised to 17½ per cent (12 per cent) absorbing £98,438 leaving the carry forward at £15,677 against £13,884 previously.

Potgietersrust Platinum which holds 43.3 per cent of the capital of Rustenburg Platinum reported a profit for the year to August 31 of £256,550 (£103,980) which was struck after providing £156,415 (£66,181) for tax. The dividend payment of 88.8-9 per cent (33½ per cent) called for £261,667 (£98,125) and an amount of £4,695 was carried forward against £9,812 previously.

Coal Shortage Cuts Copperbelt Production.—Copper production in Northern Rhodesia will be suspended for approximately four working days as from December 24, states an official announcement by the Northern Rhodesia Chamber of Mines at Kitwe. This decision was made necessary because the December allocation of coal from Wankie Colliery to the copper mines on the copperbelt was so low.

The companies suspending operations for the four days are Mulfulira Copper Mines, Nchanga Consolidated, Rhokana Corporation and Roan Antelope.

S.A. Townships: Nine Months' Results.—The estimated profit of South African Townships Mining and Finance Corporation for the nine months ended September 30, 1951, after providing for taxation was £99,300, against £141,900 for the twelve months ended December 31, 1950. In respect of the nine months' period the company have declared a dividend of 3½ per cent (5 per cent for 1950) equivalent to 4½d. per 10s. share. Warrants will be posted on or about February 6, 1952. The explanation for the financial results and dividend being declared now is that as the major portion of the Corporation's issued share capital was purchased by Rand Selection Corporation during the year, it is now a subsidiary of Rand Selection Corporation and as such is required to close its accounts on

the same date as that Corporation, namely on September 30, rather than on December 31, as formerly. It is therefore proposed that future dividend declarations by S.A. Townships will coincide approximately with those of Rand Selection Corporation.

Gold Coast Selection Raises Dividend.—A preliminary statement from Gold Coast Selection Trust for the year to September 30, announces a final dividend of 7½ per cent making 12½ per cent against 7½ per cent paid in the previous year.

Revenue by way of dividend and profit on sale of investments totalled £107,077. Expenditure, including £10,753 in respect of income tax aggregated £18,094, resulting in a profit for the year of £87,983. To this was added £320,297 brought in and £14,130 being tax recoverable in respect of previous years, making £422,401 available. The dividend payments required a total of £49,219, reserve account received £325,000 and the amount carried forward was £48,078.

Major-Gen. W. W. Richards is chairman. The annual meeting will be held on January 15.

Amari Mines Raises Dividend.—Amari Mines, which owns mining leases over tin areas comprising about 4,791 acres in Plateau Province, Northern Nigeria, produced 564 tons of tin concentrates during the year to March 31. Although this was a decrease of nine tons compared with last year's output, receipts from the sale of tin concentrates jumped from £26,424 to £42,830. Additionally, tin concentrates on hand at the fiscal year-end, since realized, brought in £1,477 giving a gross revenue of £44,307 against £27,692 in the previous year. The total costs in London and Nigeria, including freight, selling charges, royalties and depreciation was £27,270 leaving an available profit balance of £15,768, which contrasts very satisfactorily with the previous year's profits available for appropriation of £2,423.

Shareholders participated in the improved results, receiving 6 per cent against 4 per cent. Taxation liabilities amounted to £4,930 against £1,332, leaving the carry forward appreciably higher at £16,754 against £8,401 previously.

The annual meeting will be held in London on December 28. Mr. Thomas J. Salt is chairman.

Consolidated Diamond Mines Pay 125 Per Cent.—The Consolidated Diamond Mines of South West Africa, which is controlled by De Beers Consolidated Mines, has announced in a notice to shareholders that the estimated net profit for the calendar year 1951 available for distribution was £3,900,000 which compared with £2,200,289 available in the previous year. This figure appears even more impressive when it is realized that it was arrived at after providing £1,155,000 (£852,000) for taxation, £2,000,000 (£1,300,000) for capital expenditure and allocating £1,250,000 (£1,000,000) to general reserve (being the estimated value as at December 14, 1951, of deliveries of diamonds during the year in excess of the company's quota).

The company is paying a final dividend of 95 per cent equal to 9s. 6d. per share making a total of 125 per cent for 1951 compared with 60 per cent for 1950, when the aggregate distribution included a bonus payment of 20 per cent.

Sir Ernest Oppenheimer is chairman.

Burma Corporation's Good Recovery.—During the year to June 30 Burma Corporation experienced a trading loss of £202,937 compared with a previous loss of £506,239. This trading loss, however, was offset to the extent of £190,078 from proceeds of pre-evacuation metal stocks and debts recovered so that the net loss was reduced to £12,858.

Commenting on this substantial improvement in the company's position, the chairman, Mr. J. R. Govett, said that it was mainly due to the limited river transport available since August, 1950 which enabled the company to resume its production of marketable metal from surface stocks and to realize it at satisfactory prices.

Operations at the company's group of lead-silver-zinc-copper mines at Bawdin were confined during the period to repair and maintenance.

The latest balance sheet shows current assets comprising stores, metals on hand, debtors and cash of £934,650 against which there were current liabilities of £140,431.

At the extraordinary general meeting held in Rangoon on December 14, shareholders ratified the recent agreement between the company and the Burmese Government on a joint venture for the future working of the silver and lead producing mines in Upper Burma.

The agreement provides for the sale of the company's undertaking in Burma to a new company to be formed—Burma Corporation (1951) Ltd. This includes a liability to the new company of approximately £33,300. Ratification by the Burmese Government is expected in a fortnight.

MALAYAN TIN DREDGING LTD.

MR. H. ASHWORTH HOPE'S REVIEW

The Fortieth Annual General Meeting of Malayan Tin Dredging, Ltd., was held on Dec. 18 at 73, Cheapside, London, E.C.

Mr. H. Ashworth Hope, chairman of the company, presided.

The following is an extract from the statement of the chairman which was circulated to shareholders:

The profit for the year to June 30, 1951, is £64,921. After providing for taxation and crediting surplus on realization of investments, there remains a balance of £93,159 which, with the unappropriated balance from June 30, 1950, £180,782, and the previous provision for loss on subsidiary company no longer required, £17,132 makes a total credit of £291,073. The sum of £71,795 has been transferred to reserve account. Dividends totalling 1s. 3d. per share have been paid, leaving £192,528 carried forward. The distribution of 1s. 3d. per share for the year is estimated to represent approximately 3½ per cent on the capital invested in the business, including profits ploughed back, as distinct from issued share capital.

In the balance-sheet the advance from Government in respect of rehabilitation amounted to £233,809. A provisional award for war damage amounting to £183,107 has been accepted, approximately 60 per cent of which has been received.

The advances from our associated company, Southern Malayan Tin Dredging, Ltd., were obtained in order that we might finance our heavy capital expenditure in connection with Dredges Nos. 2 and 3 (previously referred to) without recourse to outside assistance.

I propose to deal with various other matters in which this company, Southern Malayan Tin Dredging, Ltd., and Kramat Pulai, Ltd., have important interests in common, in my supplementary remarks. This is a convenient practice obviating repetition and overlapping in my addresses to the shareholders of the separate companies comprising the Malayan Tin Group.

Our new No. 3A dredge has now commenced operations after long delays beyond our control. This dredge is reported to be operating satisfactorily. Now that both dredges are in operation future production should be of a satisfactory nature, provided we can be assured of regular attendance of labour on each shift. This is a problem affecting the whole industry and of course is connected with the difficult conditions prevailing in Malaya and the terrorist menace.

It is to be hoped that as a result of Mr. Lyttelton's report to Mr. Churchill, policies will be formulated to deal effectively with the Communist menace in Malaya. It must, however, be realized that it will take time for steady and progressive improvement to ensue from measures put into operation. If these measures are successful, your company can look forward to a satisfactory year's working and a progressive reduction of the temporary loan from Southern Malayan Tin Dredging, Ltd.

RESEARCH

Your Board considers it of first importance that the activities of the Tin Research Institute should be supported and given every encouragement by the tin industry.

The results of the work and research done by the Institute to date are such that the industry can look forward to their commercial development, not only providing a new outlet for the uses of tin but also improving the existing uses.

The report and accounts were adopted.

SOUTHERN MALAYAN TIN DREDGING LTD.

TAXATION AND DIVIDENDS

The Twenty-Fifth Annual General Meeting of Southern Malayan Tin Dredging, Ltd., was held on December 18 at 73, Cheapside, London, E.C.

Mr. H. Ashworth Hope, chairman of the company, presided. The following is an extract from the statement of the Chairman which was circulated to shareholders:

The working profit for the year to June 30, 1951, is £1,212,009. After providing for taxation and crediting surplus on realization of investments, there remains a balance of £498,530, which, with the unappropriated balance from June 30, 1950, £93,270, makes a total credit of £591,800. Dividends totalling 5s. per share have been paid in respect of the year. The sum of £247,814 has been transferred to general reserve leaving £112,598 carried forward. The distribution of 5s. per

share for the year is estimated to represent approximately 30½ per cent on the capital invested in the business, including profits ploughed back, as distinct from issued share capital.

Referring to the balance-sheet, expenditure on rehabilitation amounted to £450,130 at June 30 last. A provisional award for war damage amounting to £451,109 has been made. Payment of 90 per cent or more of the award is expected shortly, but the amount of the final settlement is not yet determined. The advance from Government stands at £349,959 and this sum will be set off against the amount of the award.

There is much confusion and ignorance in the minds of certain persons at the present time regarding the relationship of so-called profits to dividends. The following table shows figures of out goings and dividends as far as this company is concerned, in the year under review:

Tin duty paid to Malayan Government	£289,347
U.K. income-tax payable	462,354
U.K. profits tax payable	260,030
Mining costs	392,738
	<hr/>
	£1,404,469

Dividends paid to shareholders (net)	£231,388
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Malayan and U.K. taxation alone amounts to nearly four and a-half times the amount received by shareholders, and represents a sum that would equip the property with two large modern dredges.

The report and accounts were adopted.

KRAMAT PULAI LTD.

DIVIDEND AND BONUS MAINTAINED

The Forty-Third Annual General Meeting of Kramat Pulai, Ltd., was held on December 18 at 73, Cheapside, London, E.C.

Mr. H. Ashworth Hope, chairman of the company, presided.

The following is an extract from the statement of the Chairman which was circulated to shareholders:

The working profit for the year is £24,329. After providing for taxation there remains a balance of £10,422, which, with the unappropriated balance from March 31, 1950, £19,337, makes a total credit of £29,759. The directors recommend payment of a dividend of 3d. per share, together with a bonus of 3d. per share, making in all 6d. per share (less tax), leaving a balance of £24,509 to be carried forward. The directors are pleased to be able to maintain the rate of dividend and bonus paid in respect of the last two years. Members will appreciate, however, that it is not at present possible to say whether the circumstances obtaining next year will justify a further bonus.

Our claims for compensation and rehabilitation have not yet been assessed.

I would draw your attention to the general manager's remarks under the heading, "Prospecting," in which he states that no field work can be undertaken in respect of our Trengganu Prospecting Permit, owing to lack of security there. It is for the same reason that we are unable to carry out the intended geophysical survey of Kramat Pulai in order to ascertain whether there are further deposits of scheelite on the property. Our operations are also being constantly interfered with by bandits damaging our pipeline which runs through the jungle hills.

The high prices ruling for rubber affect all tin companies in that Chinese labour seeks work on rubber estates in the hope of benefiting from very high individual earnings. It cannot be emphasized too often that the policies of Government here and in Malaya directly affect the tin and rubber industries for better or for worse, and directors are well aware that these industries are often a pawn in the international political game.

I informed you in my address at the last annual meeting that we had prospected the Kampong Binjai area under very trying and dangerous conditions, but the results had not come up to expectations. We are still investigating the potentialities of this area as far as conditions, physical, political and financial will permit.

I shall refer to this matter in my supplementary remarks, but you will be interested to learn that Kramat Pulai, about five miles from Ipoh, was the first property in the Kinta Valley to be visited by the mission on November 10, when the members showed considerable interest in our operations and descended to the bottom of No. 12 mine to see for themselves the working of a small 30-ft. deep hole in the limestone.

The report and accounts were adopted.

**MALAYAN TIN DREDGING LTD.
SOUTHERN MALAYAN TIN
DREDGING LTD.
KRAMAT PULAI LTD.**

**MR. H. ASHWORTH HOPE'S SUPPLEMENTARY
REMARKS**

The following are extracts from supplementary remarks by the chairman, **Mr. H. Ashworth Hope**, made at the annual meetings held on December 18, which have been circulated to shareholders:

In my Supplementary Remarks at the adjourned Annual General Meeting in January of this year I addressed you at some length concerning the duty of the Chairmen of Companies such as those constituting the Malayan Tin Group to offer to their shareholders as complete a presentation as they can of all the factors affecting the company's enterprises.

At this stage I do not consider it necessary to add to what I have already said on this subject beyond stating that, as directors, we are not concerned so much with the political complexion of the Government in power as with the policies intended to be pursued and the qualifications of the Ministers entrusted with carrying out these policies.

PROSPECTING

Owing to the difficulty of prospecting in Malaya and the inability of the Authorities to provide protection we have been busy searching for likely properties outside Malaya.

In the result the Boards of Companies within the Tronoh-Malayan Tin Group, have decided to extend our operations to Siam and a Company has been formed called Tromal Prospecting, Ltd., for the purpose of examining an extensive area off the coast of Tongkah.

AMERICAN MISSION ON TIN PRODUCTION

You may have read that a Mission from America visited Malaya to examine conditions relating to the production and marketing of tin. You may also be aware that the Malayan Tin Industry has been charged by a United States sub-Committee with "gouging." At the conclusion of their visit the Mission cannot but have realized the truth and it is to be hoped that they will report the truth to the American sub-Committee.

This means profit limitation, by a partial or a complete confiscation of all profits (depending upon the details of the measure) over and above a specified datum. Applied to a wasting asset, such as tin, this might well be even worse than Dividend Limitation, and could deal a mortal blow at the future development of the Malayan Tin Industry which, as is well known, calls for the further investment of high risk Capital.

Excess Profits Tax might induce inefficiency in existing concerns and could have the effect of limiting production at a time when high production and high dollar earning are essential to the welfare of Malaya and of this country.

I trust that should the Government impose an Excess Profits Tax, it would be in such a form as not to be injurious to the Tin Mining Industry or to the welfare of Malaya.

MALAYA'S TRAGIC STATE

The tragic state into which the once happy and peaceful Malaya has been permitted to fall is only too present to the minds of all concerned with its present and future welfare. It is indeed symptomatic of the blind optimism of officialdom that after three and a half years of terror, intimidation and violence, the state of war, which in fact exists, is still designated the "emergency."

It is satisfactory to note that during Mr. Lyttelton's visit, he has availed himself of the opportunity of acquiring a true picture of the state of the country, through his contacts with the miners and planters who are in the thick of it.

The dangle by Government of the prospect of self-government for Malaya in the near future has done little to reassure the Chinese in Malaya, who constitute nearly one half of the population. Their fears that Malaya will become a prey to Communism were thereby greatly increased.

The question, which must now be answered and which is engaging the earnest attention of Mr. Oliver Lyttelton, the new Colonial Secretary, is as to the steps which must now be taken.

A part of Mr. Oliver Lyttelton's task, in addition to re-organising the direction of the campaign against the Terrorists, is to ensure that the political aspirations of both the Malays and the Chinese and other settled communities receive adequate recognition.

The first step should be an unequivocal declaration at the highest level in the United Kingdom, making it clear beyond all doubt that in no circumstances will the population of Malaya be abandoned by Great Britain to the tender mercies of the Communists, and it must be made clear that these are not merely empty words.

**SUNGEI BESI MINES
AYER HITAM TIN DREDGING**

MR. G. W. SIMMS' STATEMENT

The Annual General Meetings of Sungei Besi Mines, Ltd., and Ayer Hitam Tin Dredging, Ltd., were held in London on December 18.

The following are extracts from the statement of the Chairman, **Mr. G. W. Simms**, circulated to shareholders:

Owing to security conditions in Malaya prospecting has for the time being been brought to a standstill. In conjunction with other Companies comprising the Tronoh-Malayan Tin Group, Sungei Besi and Ayer Hitam have taken an interest in a Company called Tromal Prospecting Ltd., which has the right to prospect an area off the coast of Tongkah, in Siam. Prospecting operations have only recently started and though results to date are encouraging it is not yet possible to make a definite statement as to the prospects.

AFTERMATH OF THE CONTROL

Under the heading of "Tin Control" in my last annual Address I stated that probably the most serious effect of the late International Tin Control Scheme was the blow which it dealt to the future of the Malayan tin industry due to the practical cessation of prospecting throughout the period of its existence, and that only now is the effect of that blow about to be realized. The truth of that statement is becoming more evident with the passage of time but unfortunately it has been accentuated by the fact that except for a short period immediately after the surrender of the Japanese, during which most mining concerns were fully occupied with the rehabilitation of their properties, it has been almost impossible to carry out prospecting work. Indeed since the commencement of the emergency in the middle of 1948 it has not always been possible to undertake such work even in developed areas, and altogether out of the question in more remote areas.

Anyone familiar with the Malayan Tin Industry should be aware that it has accomplished a gigantic task of rehabilitation under most difficult conditions, and that there is not the slightest justification for suggestions made in the U.S.A. that Malayan producers have deliberately withheld production and indulged in price "gouging." The Chinese section of the industry has in fact reached a rate of production approximately equal to its pre-war rate and the short fall is entirely due to the lower production from the European section.

By far the most important question as far as the future of the Malayan tin industry is concerned is that of Security. Long-term plans for social and educational reforms are irrelevant if Malaya's future is to be Communist. Should not the whole energies of the administration for the time being be concentrated in the hands of a Governor-General entrusted with plenary powers and with authority to mobilize the whole resources of the country in men and material, public and private, for the overriding task of ending insurrection—preferably an outstanding soldier whose record will afford a guarantee (much needed) that Britain, this time, will honour her many pledges to the peoples of Malaya? The challenge is clear-cut: failure to meet it must mean good-bye to democratic progress, economic prosperity, and many other promises in the fulfilment of which our good name is bound up. And it must mean a staggering blow to the western influence in Asia.

VALUABLE NEW ALLOYS

As a result of research work carried out by the International Tin Research Institute over the past few years the contribution which Malaya's tin can make to the economy of the U.S.A. is likely to become of considerably greater importance. I refer in particular to the excellent work carried out by the International Tin Research Institute in connection with tin-nickel and tin-zinc alloys, both of which were devised and brought to a state of commercial production entirely in the Institute's laboratories.

I believe that the long-term outlook for tin is good but if it is to remain good it is essential that goodwill be re-established between producers—Malayan producers in particular—and the U.S.A. Government and consumers.

On the other hand Malayan producers are entitled to ask that the U.S.A. Government and consumers should also recognize the true position as regards the production and marketing of Malayan tin, and that if restrictions on the use of tin for commercial purposes in the U.S.A. are removed, as they should be, the price of tin is likely to rise until it reaches a figure which justifies bringing in and maintaining new production, and bears a closer relationship to the rise in price of other non-ferrous metals and other raw materials generally. Such a price rise, while industrial activity holds at present levels, should not be regarded as a cause for complaint but as a necessary factor in stimulating production to meet the consumptive demand.

The reports were adopted.

KAMUNTING TIN DREDGING

STRONG FINANCIAL POSITION

MR. JACK ADDINSELL'S STATEMENT

The Thirty-Eighth Annual General Meeting of Kamunting Tin Dredging, Ltd., was held on December 13 at 55-61, Moor-gate, London, E.C., Mr. Jack Addinsell (chairman of the company) presiding.

The following is the Chairman's statement for the year ended March 31, 1951, which had been circulated with the report and accounts and was taken as read:

Before submitting the accounts for the year under review, I should like to refer to the retirement of Mr. E. V. Pearce as chairman of the company, which office he has held for the past five years. As you may know, he has been a director since 1930, and all of us owe much to his energy and foresight and to his long experience and knowledge of the tin industry. That he has felt it necessary to vacate the chair is a matter of great regret to me and my co-directors, but I know I am expressing the view of my colleagues and shareholders alike when I say that in consenting to remain on the Board Mr. Pearce is doing us a great service.

The accounts, which I am sure shareholders will agree, reflect a strong financial position, are, I think, self-explanatory. They include the Thailand war damage award which was actually paid after the close of the financial year. In the result the Thailand Government advance is now repaid and the sum of £18,473, being the balance and shown under 'Current Assets' in the balance-sheet, has been received.

Your directors considered it prudent to increase the revenue reserves by appropriating from profit and loss account £100,000 towards the cost of the transfer of the Pangnga dredges to the new area, to which I refer later, and to increase the contingency reserve to £200,000.

After the distribution of the year's dividend of 40 per cent and providing adequate depreciation and depletion and the taxation arising on the year's profit, the carry forward on profit and loss account is £87,356.

NEW PROPERTY PURCHASED

In his speech last year the chairman advised shareholders that negotiations had commenced for the purchase of another property to which to transfer the two Pangnga dredges when the areas on which they are now operating are exhausted. No. 2 dredge will finish at the latest in the spring of 1952 and No. 1 dredge about a year later. The check-boring of the new area at Bangtoe has confirmed the values given by the original boring, and we have purchased the area for some £80,000. Last year shareholders were advised that the purchase consideration would be satisfied by the issue to the vendors of unissued shares in your company. In view, however, of the company's strong financial position it has been arranged that settlement will be made in cash.

The area is a valuable one estimated to contain some 57,000,000 cu. yd. of dredgeable ground with an average tin concentrate content of 0.36 lb. per cu. yd., giving a total content of 14,390 tons tin concentrate. The life of the property with two dredges operating is estimated to be thirteen years.

The present estimated cost of dismantling and removing the dredges to the new area, and their re-erection and re-equipment is approximately £472,000. It is important that there should be as little delay as possible in the re-equipment of the dredges and your directors have, therefore, decided that orders should now be placed for the necessary materials; by so doing it is hoped to reduce to a minimum the loss of revenue to the company between the time the present Pangnga areas are worked out and mining can commence at Bangtoe.

It may be of interest to shareholders to mention that one new dredge of similar total capacity to those at Pangnga would cost to-day something in the neighbourhood of £750,000, and certainly would not be in operation in less than five years from the date of placing the order.

CONDITIONS IN MALAYA

Due to terrorism, conditions in Malaya are such as to render prospecting for new areas practically impossible. This state of affairs makes it necessary, having regard to the desirability of maintaining production in the future, to expedite our mining operations on the new area we have acquired at Bangtoe.

Since the completion of the accounts notification has been received from Malaya that an award has been made by the War Damage Commission in respect of our claims for restoration of assets replaced and repaired and for compensation for assets lost or destroyed. This assessed award is in the sum of £174,276. An interim dividend of 60 per cent of this sum is expected to be paid shortly and set off against the Government rehabilitation advances, but the final balance will not be settled immediately.

We are now repaying to the Government on account of the rehabilitation advances the sum of £69,017, representing the difference between the total advanced and 90 per cent of the award, thereby avoiding the creation of a debenture and consequent interest payments. Should the final distribution be in excess of this rate, the amount overpaid will be refunded to the company.

In conclusion, I must refer to the conditions in Malaya, which, as you will have seen in the Press, continue to be the cause for grave anxiety, and I am sure that you will all wish to join with me in expressing our appreciation of the courage and loyalty shown by our staff in the East.

The report and accounts were unanimously adopted and a final dividend of 15 per cent, less tax, making a total of 40 per cent, for the year, was approved.

The retiring director, Mr. Ernest V. Pearce, was re-elected, and the auditors, Messrs. Deloitte Plender Griffiths and Co., having been re-appointed, the proceedings terminated.

JANTAR NIGERIA CO. LTD.

The Thirty-Ninth Annual General Meeting of The Jantar Nigeria Co., Ltd., was held on December 20 at the registered office, 119-125, Finsbury Pavement, London, E.C.

Mr. C. A. P. Tarbutt, chairman and managing director, presided.

The following is an extract from the statement of the Chairman which was circulated with the report and accounts for the year ended September 30, 1951:

Output for the year was 266 tons tin and 232 tons columbite, as compared with 217 tons tin and 226 tons columbite last year, an increase of 49 tons tin and 6 tons columbite. The increase in tin production should be considered as exceptional, and is unlikely to be repeated.

Last year, the tin stock was valued on the basis of the average selling price of that year. This was considered an equitable basis on account of the fluctuating market which existed last autumn. In the event of our stock of 71 tons tin at September 30, 1950, realized £23,000 more than was taken credit for in the 1950 accounts. The basis of valuation of this year's stock is the three months forward price at Sept. 30, 1951.

The continuation of drilling on the basalt lead gives indications that a deposit in excess of 2,500 tons of tin exists in this area. Your directors, in co-operation with the Nigerian staff, have given continuous study to the problem of extracting the tin economically. As far as is known, there is no precedent to our particular conditions, and the operations with which your directors propose to proceed must be considered as experimental. Underground methods will be necessary to mine the tin, and the costs of operations are likely to be higher than those which result from the opencast working of our other areas.

The necessary plant and equipment for the initial stage of the operation has been ordered, and work on the deposit will commence as soon as this has been delivered at the mine.

Profit for the year before taxation amounts to £172,009, against £60,020 last year. As I have stated, £23,000 of this year's profit is strictly applicable to last year's results.

Taxation this year takes £59,652 against £36,030 last year, and there is a distributable balance at the credit of the profit and loss account of £77,408.

Your directors recommend the payment of a dividend of 35 per cent, less income-tax at 9s. 6d. in the £.

The report and accounts were adopted.

DIVIDENDS

African & European Investment 3% (Feb. 15)
 African Land & Investment 6% (Jan. 18)
 Apex Mines 25% (Feb. 6)
 Ayer Hitam Tin ls. i (Jan. 17)
 Climax Rock Drill 2½% i (Jan. 11)
 Gold Coast Selection Trust 7½%
 London & Rhodesian Mining & Land 6% i
 Luipaard's Vlei Estate & Gold 3¾% (Feb. 6)
 Malaysiam Tin 5% (Jan. 31)
 Malayan Tin Dredging 3d. i (Jan. 31)
 Minworth Metals 20%
 Puket Tin 6d. i (Dec. 28)
 Rand Selection 40%
 Rooiberg Minerals 37½% i
 South African Coal Estates 8½%
 Southern Malayan Tin ls. 3d. i (Jan. 29)
 Southern Tronoh Tin ls. i (Jan. 9)
 Sungei Besi Mines 7 1-5d. (Jan. 18)
 Tanjong Tin 25% i (Dec. 22)
 Tronoh Mines ls. 3d. i (Jan. 11)
 Vereeniging Brick & Tile 24% (Dec. 31).

i interim

* Tax free

HARRISONS & CROSFIELD, LTD.

The Annual Meeting of Harrisons & Crosfield, Ltd., was held on December 18, in London.

Mr. H. Eric Miller, the Chairman, reported an increase in group trading profit from £1,229,232 to £1,571,344. The net profit increased from £457,550 to £625,712. Group Reserves now stand at £2,666,420. The final dividend is 22½ per cent on the Deferred Ordinary Stock, making 30 per cent for the year, which represents less than 5 per cent on such Stock plus Reserves.

Traders, he said, generally have enjoyed a period of abnormal activity, engendered by the urge to make up some of the leeway caused by the self-denial imposed on all during and since the war. All-in Group Reserves have been increased by £461,057 during the year and to-day stand at £2,666,420.

The idea of a Welfare State makes a natural appeal to all men of goodwill, but its maintenance depends on a proper understanding of the obligations as well as the benefits which devolve upon the citizens of such a State. Our Government will, I trust, have the support of employers and of workers in the stupendous task which lies ahead—but intensive education is necessary to make clear to all the utter folly of downing tools or going slow on the slightest pretext, as is all too common at the present time.

We refuse to believe that the qualities which raised this nation to leadership in the forward march of civilization, have been permanently swamped by false doctrines. Be that as it may, keen competition will soon have to be faced with rising intensity in the struggle for our needful share of the world markets, in which no political ideology will avail us. We have travelled the hard road before, as we did, almost alone in 1940, and once everybody sees clearly that the road now ahead of us is not an easy one I hope and believe that our sterling qualities will again save the situation.

Our new Government seem to be tackling their problems in real earnest and with courage which should command respect, but they need the active support of the whole community. The intrinsic value of the £ will only be re-established by our collective determination to give an honest day's work in return for our pay-packets.

It may interest you to know that the various Retirement Funds created for the staff of the Group, both European and Asian, partly on a contributory basis, have a capital value to-day of over £850,000, in addition to which there are contributory Pension Schemes for the benefit of the majority of the regular staff.

Malaya: The whole community there has been living under the strain of Communist-inspired terrorism, and one can picture the relief with which all concerned with stamping out this evil have seized the occasion of Mr. Lyttelton's visit to appraise him at first-hand of the deficiencies which the long-drawn struggle has brought to light. His assurances to the men on the spot are encouraging, and we all trust that the Home Government will give full and immediate effect to the recommendations which he will be making to them in person on his return home. The re-establishment of peaceful conditions in all parts of South East Asia is of vital import not only to Malaya, but to the sterling area and the whole of the free world.

North Borneo: Shortage of suitable workpeople is the major problem, but the peaceable conditions prevailing in North Borneo will, we believe, in time attract people from other parts of the Malayan Archipelago where the pressure of population is excessive.

TEA AND RUBBER INDUSTRIES

Reviewing the Tea Industry, he said: The amount that comes forward for sale in the London Auctions largely depends on how London prices compare with those in Calcutta and Colombo. To secure sufficient supplies for this country it is evident that primary wholesalers will have to buy heavily in Eastern markets, but the retail price control in the U.K. may make it impracticable for them to purchase their full requirements in competition with buyers from other markets.

The policy of the U.S.A. Government continues to be the dominating factor in the Rubber Market, and I look forward hopefully to the time when American manufacturers and consumers alike will be allowed to make greater use of this wonderful material. In my opinion, both natural and synthetic have ample scope to progress side by side. There have been marked advances in technique of production and utilization of synthetics, but scientists at work on behalf of natural rubber are making headway too. Although the price factor cannot be left out of account in certain fields of use, such as rubber in road surfacing and in Latex foam, these should literally act as a cushion in any prolonged decline in the price of natural.

The report was adopted.

THE SOUTH WEST AFRICA CO.

The Annual General Meeting of The South West Africa Company, Limited, was held on December 14 in London.

Sir Douglas Malcolm, K.C.M.G., the chairman, in the course of his speech said:

The directors have considered it prudent to transfer the sum of £50,000 from our taxed profits of the year to general reserve, thereby increasing that reserve to £300,000.

Under current liabilities, "Creditors and Accrued Charges" stands at £66,348 against £39,622 in the previous year's accounts. The major part of this amount is represented by sums due at June 30 last in South and South West Africa for supplies, wages salaries, and ore transport, which have since been paid.

Turning to the credit side of the balance-sheet, we have, as usual, set out under the three separate headings, "Freehold Buildings," "Mining Plant and Shafts," and "Equipment and Tools," the cost, accumulated depreciation, and net book value respectively. A comparison of these figures with those in our last year's accounts shows an increase in the net book value of £129,071. You will appreciate that with the expansion of the company's activities the provision of suitable buildings, plant, and equipment has been made imperative.

The figure against "Investments, and Shares in other Companies—quoted," at £70,112, is almost exactly the same as that in our previous accounts. You will note that at the date of the balance-sheet, these quoted investments showed an appreciation of about £5,400. The unquoted investments consist entirely of our shareholding in the Tsumeb Corporation, Ltd., as explained in the directors' report. The profits of this concern for the year ended June 30, 1951, show a considerable increase compared with those of the previous year, and if prices of base metals remain at reasonably high levels our investment in this corporation should continue to be a most profitable one.

The profit on the year's working, after providing for taxation, is £151,618, compared with the figure in the previous year's accounts of £81,658. It is proposed to pay a final dividend of 5s. per share, less tax at 9s. 6d. in the £, which, together with the interim dividend of 2s. per share paid in July last, will absorb £97,720, leaving to be carried forward the sum of £46,618.

During the year under review we have continued our development operations at Abenab West and at our other properties, resulting in increased tonnages of ore reserves being proved. We are making additions to the flotation plant at Abenab West. These additions and improvements together with plant additions at our other mines will, we hope, result in enhanced production. We are being severely handicapped in our endeavours to keep up a regular flow of concentrates from the mine, by reason of the fact that the capacity of the narrow gauge railway which forms part of the system between Grootfontein and Walvis Bay is strictly limited. We have also found difficulty in arranging for regular shipping opportunities from Walvis Bay to the continent of Europe. These matters, however, are having our constant and urgent attention, and it is hoped that, so far as the railway is concerned, with a continuance of the co-operation shown by the South West African Administration and railway officials and by our neighbours, Tsumeb Corporation, Ltd., the position will be greatly improved in the near future.

Production on fused vanadic acid, both on the Continent and in England, has continued at as rapid a pace as possible, though not on such a scale as we would have wished. Difficulties which have arisen are being overcome, however, and we are now entering the stage when, subject to our being able to bring our lead-vanadium concentrates to Europe in substantial quantities at regular intervals, our production and sales of fused vanadic acid will reach satisfactory proportions.

Base metal prices, as is well known, continue at a very high level and consequently prices we have received for our products have been most satisfactory.

We have continued to produce certain quantities of tin/wolfram concentrates which, though tonnages are not great, have nevertheless brought in satisfactory profits. In addition some quantities of zinc concentrates also have been produced and sold, and steps are being taken to increase this production.

As regards the future, although, as I have said on previous occasions, I am reluctant to make any forecast, I feel sufficiently optimistic regarding the probable results accruing from the financial year on which we entered on July 1 last, to say that, in my opinion, our profits before taxation should not be less than those in respect of the accounts which you have before you, always, of course, provided that prices of metals which our ores contain remain at reasonably high levels and that our hopes of an early improvement in the railings and shipping position are realized.

The report was adopted.

MOUNT ISA MINES

The Nineteenth Annual General Meeting of Mount Isa Mines, Ltd., was held on December 3 in Brisbane, Australia.

Mr. J. Kruttschnitt, Chairman of the company, presided, and in the course of his speech said:

The profit for the year amounted to £1,360,842 after providing £114,381 for interest on debentures, £578,364 for depreciation on buildings, plant and machinery, £1,359,923 for lead price bonus to employees, as awarded by the Industrial Court, and £1,745,665 for estimated Federal income-tax.

From the profits of the year the directors have recommended the payment of a final dividend of 15 per cent, comprising 10 per cent regular and 5 per cent extra, thus absorbing £863,596 of the net profit. Added to the interim dividend of 10 per cent paid on June 29 the total distribution to stockholders will amount to £1,354,384. The balance carried forward is £6,458.

Although the dividends for the period amount to 25 per cent of the fully paid stock it is pertinent to note that when referred to the funds employed in the business the total distribution of profits amounts to only 14.21 per cent. Surely, this cannot be considered anything more than a reasonable return on a mining venture.

PRODUCTION AND OPERATIONS

Total ore mined and treated, including 6,441 tons of siliceous fluxing ore, was 565,716 tons, compared with 539,526 tons for the preceding period. Mine production was hampered by a suspension of operations for 16 days due to shortage of coal, and nine days as a result of a major breakdown on the No. 2 ore hoist. 2,241 tons of siliceous oxidised ore, purchased locally, were smelted direct.

Lead production at 34,650 tons exceeded last year's output by 1,044 tons, and silver production at 2,651,928 oz. exceeded the previous period by 68,462 oz. Output of zinc concentrates amounted to 45,096 tons, compared with 41,743 tons for the preceding period.

It will be noted from the general manager's report that the silver and lead contents at 5.4 oz. and 7.3 per cent, respectively, were slightly lower than for the year previous, but the zinc assay of 7.3 per cent was a shade higher.

The general manager's report discloses a continuing increase in operating costs, exclusive of the impact of the lead price bonus. Aside from the upward trend in the price of supplies, a rise in the basic wage of £1 13s. per week was largely responsible for augmented costs.

Total lead-zinc ore reserves, including developed and prospective classifications, were calculated as at June 30, 1951, to be 9,498,905 tons, after giving effect to the ore mined after the period. Thus there was a gain over the previous year of 329,207 tons. Copper ore reserves remain unaltered.

ABSORPTION OF MINING TRUST, LTD.

As briefly referred to in the director's report, an agreement was reached on June 29 between the Mining Trust, Ltd., and this company which provided for an exchange of shares at a ratio of seven to one. Thus the shareholders of Mining Trust have been allotted 849,427 Mount Isa £1 shares in exchange for their 5,945,988 ss. shares. However, as the result of a distribution of 1s. per share by way of reduction of capital the nominal value of Mining Trust shares becomes 4s. Since more than 95 per cent of Mining Trust's shareholders assented to the agreement the exchange of shares becomes compulsory upon the remaining 5 per cent. As agreed, provision has been made for the payment of the final dividend on this additional share issue.

Through this deal the company acquires the entire issued capital of the Mining Trust, Ltd., which among other things owns the Britannia Lead Co., refineries of our lead bullion, and £A.1,147,040 of our Eight per Cent First Mortgage debenture stock.

OUTLOOK FOR MOUNT ISA'S PRODUCTS

Although the major part of the lead contained in our production of silver-lead bullion was contracted for sale to the British Ministry of Supply, it was refined by the Britannia Lead Company. The silver therefrom is sold currently on the London and foreign markets. Obviously, no problem arises at the moment for the ready disposition of these products.

The steady growth in the demand for base metals gave rise to a conference convened at Washington to work out a formula for the allocation of metals to the consuming countries. It is understood that allocations have been made, without, however, providing the countries involved the means of obtaining their quotas. The workability of the scheme remains to be demonstrated.

The report and accounts for the year ended June 30, 1951, were adopted and a final dividend was declared of 15 per cent, payable December 31, 1951, to stockholders registered November 23.

KENTAN GOLD AREAS LTD.

EARL GREY'S REVIEW

INCREASED OPERATING PROFIT

The Annual General Meeting of Kentan Gold Areas, Ltd., was held on December 19, in London. The Rt. Hon. Earl Grey presided.

The Chairman's review of Geita Gold Mining Co., Ltd., circulated with the Report and Accounts stated that although milling operations at the Geita Mine showed a favourable trend of improvement for the year to 30th June, 1950, in that there had been an increase in tonnage of ore treated and percentage recovery, while operating costs had been held against rising costs of supplies and labour, the tempo had slowed down, especially in the latter months. In particular, the native labour situation is a cause of serious concern, and is the limiting factor to greater output. An increase in native wages in August helped to arrest the seasonal fall which occurs from June to November but has so far had little effect on the general position. Apart from its scarcity, the cost of labour rose by 8.8 per cent during the year, and in the first quarter of the current year there has been a further increase of over 20 per cent.

SURVEY OF THE COMPANY'S OPERATIONS

A thorough survey of the company's operations has been conducted by the Consulting Staff of New Consolidated Gold Fields, Ltd., who have made many recommendations, and it has been agreed in principle that New Consolidated Gold Fields, Ltd., should act as the Company's consulting engineers for a three-year period in order to assist in the carrying-out of these recommendations.

The operating profit for the year was £81,719, as compared with £64,064 for the year ended 30th June, 1950. After adding £490 in respect of Insurance Claim recoverable, charging £40,198 for depreciation (less profit on sales of plant), and making provision for debenture and loan interest and the final instalment of debenture premium reserve, the loss for the year was £6,882 as against £40,434 for the previous year. The balance of loss at June 30, 1951, amounted to £391,046.

The results for the first four months of the current financial year are as follows:

	July	Aug.	Sept.	Oct.
Ore treated, long tons	17,000	16,300	16,000	16,000
Average daily tonnage	548	532	533	516
Gold recovered, fine ozs.	2,800	2,292	2,283	2,656
Recovery percentage	88.2	85.5	84.8	84.7
Cost before depreciation, shs. per ton	35.22	37.40	36.18	37.12
Estimated operating profit	£4,807	—	—	£4,410
Estimated operating loss	—	£2,511	£610	—

The relaxation of the International Monetary Fund's restriction on the sale of gold, and the consent of the Governor of Tanganyika Territory to the sale of 40 per cent of the output on the free market, will be of some help in meeting the rising cost of stores and labour. It is also understood that the Mining (Royalty) Regulations, 1948, may be replaced by a simpler formula with provision for offsetting prior and current losses.

URUWIRA MINERALS, LTD.

Reference was made to the Annual Report and Accounts of Uruwira Minerals, Ltd., for the year ended March 31, 1951, which showed that expenditure for the year, including £82,976 on development, had been covered by the proceeds of the sale of concentrates from the Pilot Plant. Ore reserves at March 31, 1951, were estimated at 2,370,000 metric tons of an average metal content of 3.8 per cent lead, 0.8 per cent copper, 118 grams of silver and 1.9 grams of gold per ton. At July 31, 1951, the estimated ore reserves had increased to 3,000,000 metric tons. Present ore reserves are estimated to be sufficient to prepare for full-scale production promptly.

Negotiations are in progress with the Economic Co-operation Administration and some of the major shareholders for a loan to cover the cost of the milling plant and equipment required.

The report and accounts were adopted.

DOMINION REEFS (KLERKSDORP)

ENCOURAGING DEVELOPMENT WORK RESULTS

The annual general meeting of Dominion Reefs (Klerksdorp) Ltd., was held on December 18 in London. **Mr. W. M. Kirkpatrick** (Chairman), presiding.

The following are extracts from his circulated Statement: In view of the need to conserve our resources, it was decided to confine development work mainly to exploring the ground west of the upthrow fault, an entirely unknown area.

The development in the Mackenzie Section calls for special mention. This is the first major discovery of economic importance which has been made on the mine for a number of years. Altogether a total of 1,260 ft. of development on reef in this area was sampled, of which 55.0 per cent averaged 6.99 dwt.

For the four months following the year under review development was confined almost wholly to the Mackenzie Section west of the upthrow fault. A total of 1,435 ft. was developed on reef and sampled of which the following are the main features.

On No. 15 level the North drive was advanced a further 120 ft. of which 55 ft. averaged 7.61 dwt. The South Drive was advanced a further 465 ft. of which 85 ft. averaged 5.84 dwt. Raise 4,226 ft. South was advanced a further 150 ft. in low values and Raise 4,714 ft. South was advanced a further 75 ft., of which 40 ft. averaged 6.05 dwt. Raise 5,184 ft. South was started and advanced 110 ft., of which 15 ft. averaged 2.87 dwt.

Winze 4,535 ft. South was started and advanced 35 ft., of which 30 ft. averaged 9.02 dwt. Winze 3,922 ft. South was started and advanced 25 ft., averaging 21.26 dwt. Raise 4,533 ft. South was started and advanced 55 ft. averaging 27.92 dwt.

On No. 14 level a North drive was commenced off Raise 4,714 ft. South and advanced 200 ft., of which 175 ft. averaged 30.44 dwt. A South drive was started and advanced 175 ft. of which 120 ft. averaged 11.33 dwt.

This work continues to show the promise of the earlier work in the new area. Some time must elapse before we reap the benefit of this development in our monthly return. However, we have a sound basis for restrained optimism.

The report was adopted.

BRITISH BURMAH PETROLEUM

OPERATIONS DOMINATED BY MERGER PLANS

The Fortieth Ordinary General Meeting of the British Burmah Petroleum Co., Ltd., was held on December 13 in London. **Mr. Keith Trevor, M.C.**, presiding in the absence of the chairman, **Mr. A. P. Faicney**.

The following is an extract from the chairman's statement: The operations in Burma during the year under review have been dominated by the arrangement agreed between the Burmah Oil Co., Ltd., the Indo-Burma Petroleum Co., Ltd., and your company whereunder their interests should be merged through the medium of a non-profit earning company in which the three participants should be interested to the extent of specific percentages. In the case of the British Burmah Petroleum Co., this percentage has been finally agreed at 2½ per cent.

Although the foregoing has been the practical basis of operations, regard has always been had to the possibility that an agreement might be reached with the Burmese Government whereby that Government should become a partner in the indigenous oil industry, and you will no doubt have noticed the recent announcement that His Majesty's Government have offered to make available a loan of up to £2,500,000 to the Burmese Government for this purpose. Negotiations are still proceeding but have not reached finality.

Your company's share of the proceeds of sale of oil products in Burma is somewhat larger than for the previous year. In fact, it now transpires that the amount brought to credit last year was excessive mainly owing to the award by the Industrial Court in Burma of a substantial sum to employees who were dismissed, as they could not be usefully employed owing to the unsettled conditions at the fields and at the refinery. Shortly after the end of the year covered by the accounts, your company's organization in Burma was finally closed down and the local management is now vested in the Burmah Oil Company.

The results of the wholly-owned South African subsidiary company are incorporated in the consolidated accounts, and the profit for the year under review is somewhat larger than that for the previous year. The depreciation in the main shareholdings, by reference to market prices at March 31 last, remains substantially unchanged.

The report was adopted.

STREAM-LINE FILTERS LTD.

SATISFACTORY PROGRESS

RECORD PROFIT

Mr. C. S. Garland, A.R.C.S., B.Sc., F.R.I.C., M.I.Chem.E., (Chairman and Managing Director), presiding at the Fifteenth Annual Meeting of the Company held on Saturday, Dec. 15, at the offices of the company, Ingate Place, London, S.W.8, said:

Our Company has had a successful year, turnover and profits both being at record levels but the net profit of the parent Company at £37,357 must be regarded as exceptional.

The disappearance of the item of £95,400 advances on uncompleted contracts, the reduction of £85,278 in the value of stocks and work in progress and increase of £92,416 in cash and securities are all due to the completion during the year of important contracts for oil separator vessels, for lubrication systems for several steel rolling mills and oil purification plants for a number of transformer and switch-gear stations.

DIFFICULT SUPPLY POSITION

The delay in deliveries of supplies as the re-armament programme got under way in 1950 is also responsible for some reduction in stocks and increase in cash balances. These difficulties in supply of steel and increases in the price of paper of which our Company is a very large user continue to impede manufacturing schedules and cause unforeseen increases in costs.

While the cash position at December 31, 1950, appears to be very strong it must be remembered that taxation of the year takes £71,153 and the tax liability of the group is £170,714. The balance remaining will be hardly sufficient for building up stocks of raw materials if and when deliveries become normal and to make a start on replacing the Company's plant and machinery which, although completely renewed in 1945 to 1947, is now from four to six years old. To replace the plant and machinery at present costs would require more than the Company's issued capital.

CONTINUED EXPANSION OF BUSINESS

The volume of business of the parent Company and of its subsidiaries continues to expand and amongst other work of public service the vessels referred to above, built and equipped by Stream-Line Filters, are now keeping some forty of the largest harbours in the world free from pollution from the oily water which would otherwise be discharged from tankers and oil burning ships. Our Company's products also make a valuable contribution to the safety of jet-propelled aircraft.

Stream-Line filters have a high reputation in the sixty-two countries where nearly 70 per cent of our output is sold and the strength and stability of our business is sustained by our policy of quoting fixed prices, even though, under present conditions of rapidly increasing costs of raw materials and labour, this results in some fluctuations in the annual profits. We can, however, look to the future with every confidence of being able to continue to earn the modest dividend which a prudent financial policy dictates.

TRIBUTE TO STAFF

The Directors wish to put on record their appreciation of the efforts of the staff and workpeople whose loyalty and hard work in spite of difficulties of supplies have contributed to results in which all, shareholders, directors and employees alike can take a legitimate pride. The report and accounts were adopted with a hearty vote of thanks to the Chairman, Directors, staff and employees.

Mr. H. Talbot, who retires by rotation, was re-elected, also **Mr. F. H. Rogers**.

The auditors, Messrs. Lever, Honeyman & Co., were re-appointed and the proceedings terminated.

CAPITAL REQUIRED. To explore four new Mining Concessions bearing Pyrites, Gold, Silver and Manganese deposits. For further particulars please apply to Box 514, c/o The Mining Journal, 15, George Street, London, E.C.4.

ANGLO AMERICAN CORPORATION GROUP OF COLLIERIES DECLARATION OF COLLIERY DIVIDENDS

NOTICE IS HEREBY GIVEN that DIVIDENDS have been declared payable to shareholders/stockholders registered in the books of the undermentioned Companies at the close of business on the 31st December, 1951.

The Dividends are declared in the currency of the Union of South Africa and become due on January 2, 1952. Warrants will be posted from the Head and London Offices on or about the 15th February, 1952.

The dividends are payable subject to the usual conditions which can be inspected at the Head and London Offices of the Companies.

The Transfer Books and Register of Members will be closed in each case from January 1, 1952, to January 8, 1952, both days inclusive.

The effective rate of Non-Resident Shareholders' Tax is 7½ per cent.

NAME OF COMPANY (Each of which is incorporated in the Union of South Africa)	DIVIDEND No.	RATE OF DIVIDEND
*Amalgamated Collieries of South Africa, Ltd.	31	2/- per £1 share.
South African Coal Estates (Witbank) Ltd.	58	(Interim) 1/9 per £1 share.
Springbok Colliery Ltd.	9	1/- per 5/- unit of Stock

*The estimated net profit of Amalgamated Collieries of South Africa Ltd. for the year ending December 31, 1951, is £491,000 before providing for taxation. This figure is provisional and subject to the final audit. The profit for the year 1950 was £474,355 before providing for taxation.

BY ORDER OF THE BOARDS,
ANGLO AMERICAN CORPORATION OF SOUTH AFRICA,
December 14, 1951.
11, Old Jewry, E.C.2.

W. C. SQUIRE,
Assistant London Secretary.



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Every now and then some question of business or finance arises which, you feel, really isn't your job. But it may very well be ours. We keep upon our staff a number of people who are very knowledgeable in all kinds of matters which are not, strictly speaking, 'banking'. These specialists will obtain your currency when you go abroad (and your passport too, if you wish). They will act as your Executor, help with your Income Tax problems and so on. Indeed, on all those occasions when the services of a financial expert would be more than a little helpful, it is sound commonsense to step into the nearest branch of the Westminster Bank.

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(INCORPORATED IN THE UNION OF SOUTH AFRICA)
DIVIDEND No. 74

With reference to the notice of declaration of dividend published in the Press on November 30, 1951, the following information is published for the guidance of holders of share warrants to bearer. The undermentioned dividend will be paid in British currency at par on or after the 21st January, 1952, after surrender of COUPON No. 75 at Barclays Bank (Dominion, Colonial and Overseas), Circus Place, London Wall, London, E.C.2, or at the equivalent in Belgian currency at the office of the Guaranty Trust Company of New York, 27, Avenue des Arts, Brussels, Belgium, where listing forms may be obtained.

Coupons must be left four clear days for examination and may be presented any day (Saturdays excepted) between the hours of 11 a.m. and 2 p.m.

Coupons belonging to holders resident in Great Britain or Northern Ireland will be paid at the rate of 1s. 3.434d. per share, which is arrived at as follows:

	s. d. per share
Amount of dividend declared (in British currency at par)	2 0
Less: South African non-resident shareholders' tax at 1s. 3.84d. in the £	1.584
	1 10.416
Less: United Kingdom Income Tax at 4s. 9d. in the £ on the Gross amount of the dividend of 2s. 5.398d.	6.982
Net amount:	1 3.434

United Kingdom Income Tax will be deducted from coupons presented for payment in London unless such coupons are accompanied by Inland Revenue declarations.

For and on behalf of

ANGLO AMERICAN CORPORATION OF SOUTH AFRICA,
LIMITED.

11, Old Jewry, E.C.2.
London Office:
18th December, 1951.

London Secretaries,
W. E. GROVES.

NOTE:—The Corporation has been requested by the Commissioners of Inland Revenue to state:—

Under the provisions of Section 36 and the Sixth Schedule of the Finance Act 1950 relating to "unilateral relief" from double taxation, South African tax applicable to the dividend is allowable as a credit against the United Kingdom tax payable in respect of the dividend. The deduction of tax at the reduced rate of 4s. 9d. in the £ instead of at the standard rate of 9s. 6d. in the £ represents a provisional allowance of credit at the rate of 4s. 9d. in the £. The final rate of credit allowable to a particular shareholder depends on his personal rate of tax; it may be more or less than 4s. 9d. in the £ but must not exceed 3/4ths of the personal rate. Revision of the credit involves a corresponding adjustment of the amount shown above as the gross amount of the dividend for United Kingdom tax purposes.

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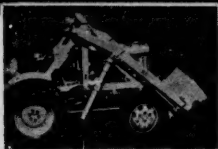
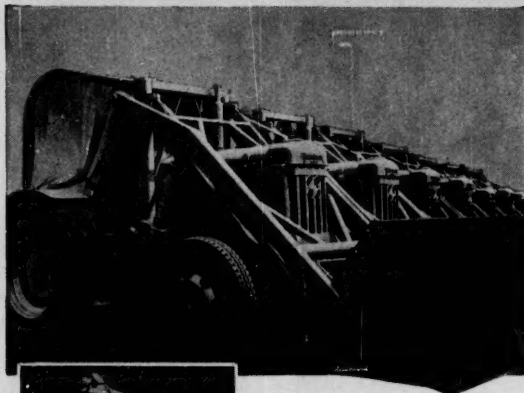
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